STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-2, Sub 1142

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Application of Duke Energy Progress,	)	BRIEF OF THE
LLC, for Adjustment of Rates and	)	ATTORNEY GENERAL'S
Charges Applicable to Electric Service	)	OFFICE
in North Carolina	)	

The North Carolina Attorney General's Office (the "AGO") respectfully submits this Brief in opposition to the application for a general rate increase filed by Duke Energy Progress, LLC ("Duke" or the "Company") in the above-captioned docket.

INTRODUCTION

Duke asks the Commission to approve a massive rate increase on North Carolina ratepayers. Under the law, Duke bears the burden of proof to show that this proposed increase is both just and reasonable. Duke has failed to meet that burden.

In this Brief, the AGO focuses on four key problems with Duke's proposed rate increase:

First, a substantial part of Duke's requested increase arises from its attempt to force ratepayers to shoulder over a billion dollars---almost $200 million annually over the next ten years---to pay for Duke's past and future coal ash–related closure costs. The record establishes that these coal ash-related costs were caused in large part by Duke's own poor decisions over many years in managing coal ash. These poor decisions include decisions not to follow best practices for ash management, and a pattern of allowing leaks and seeps to carry contaminated water outside of unlined ash basins. Duke's proposal to shift these coal ash costs onto ratepayers by labeling them as ordinary costs of compliance with regulation is unreasonable, highly unfair to ratepayers, and should be rejected.

Second, Duke's proposed increase – 26% to the basic customer charge for residential customers (on top of the 65% increase allowed just three years ago), more than doubling the fixed charge imposed prior to 2013 – undermines energy efficiency goals, and would shift costs from high-end users to those who must carefully budget their consumption, including low-income and elderly users who tend to consume less electricity per month. As a result, under Duke's plan, low-income and lower-use ratepayers would effectively subsidize less efficient, high-intensity use by others.

Third, the 9.9% rate of return on equity and 52% equity capital structure proposed in the partial settlement are significantly higher than necessary to attract investors. Together, these factors unnecessarily add over $100 million annually to the revenue requirement. It would be unfair to North Carolina consumers – who already have to stretch their resources to cover basic costs of living – to require them to fund such a windfall.

Fourth, while the AGO supports Duke in its efforts to plan for efficient and effective utility service for the future, Duke has not yet provided sufficient support for its $13 billion dollar plan for grid modernization. Duke should be required to provide the Commission and the public with additional information to support this request to assure that the public interest is served.

In addition to these problems, the AGO notes that the Commission has established a separate rulemaking proceeding to consider rate adjustments utilities may need to make to reflect the impact of recent federal tax cuts to utilities. The AGO intends to participate in that docket to argue for appropriate rate reductions for consumers and notes that future action to implement rate reductions may be needed by Duke.

I. RATEPAYERS SHOULD NOT BE FORCED TO COVER THE COSTS CAUSED BY DUKE'S YEARS OF FAILURE IN MANAGOING COAL ASH BASINS.

A large portion of the costs that Duke is seeking to recover arise from the management, storage, and closure of coal ash basins used in connection with all eight of Duke's coal-fired power plants. As the following discussion explains, the record before the Commission establishes that Duke has not dealt reasonably or prudently with the resulting costs related to coal ash. Indeed, Duke's own failures to deal appropriately with coal ash led directly to many of the regulatory requirements for which Duke is now asking North Carolina consumers to pay. North Carolina consumers should not have to bear those costs. North Carolina utility law only allows Duke to recover costs that were reasonably and prudently incurred.

This section of the Brief will begin by setting forth the appropriate legal standards the Commission must follow in a rate case regarding recovery of costs, including the requirement that the Commission must examine whether the coal ash related costs incurred by Duke were reasonably and prudently incurred.

Next, this section of the Brief recounts the history of the evolution of industry standards regarding coal ash disposal, and how—even as awareness grew among the industry, scientists, and regulators that coal ash wastes had the potential for causing great environmental damage to surface and ground water via contaminated leaks and seeps--Duke failed to follow industry trends toward lining ash impoundments and failed to abide by the law. The Brief will detail how Duke's failures to deal prudently with coal ash resulted in legislative and regulatory action, and court-ordered remediation, including

Duke pleading guilty to criminal negligence and in the North Carolina General Assembly's enactment of the Coal Ash Management Act.

Then the Brief will demonstrate how Duke's failure to abide by its duties to manage its coal ash prudently and to follow environmental rules directly resulted in its request for greater costs. Four experts testified in this case that the costs Duke incurred to close its coal ash basins are significantly higher than they should have been.

The Brief next shows how Duke's imprudent treatment of coal ash costs means that it did not meet its burden of proof in this matter regarding cost recovery and how it would be unfair for consumers to shoulder those costs. The Brief also points out several additional problems with Duke's request for recovery of coal ash costs, including problems that are related to its handling of insurance coverage matters, accounting treatment of such costs, and proposal to shoehorn such costs into an annual fuel rider proceeding.

A. <u>When the Commission Considers Whether Duke Can Recover Its Coal Ash Related Costs It Needs to Consider Whether the Costs Incurred Are Reasonable and Prudent.</u>

Under North Carolina law, when setting rates, the Commission is directed to:

- analyze cost data from a "test year" (N.C. Gen. Stat. § 62-133(c));
- ascertain its "reasonable" capital costs for property that is "used and useful" to providing service in the State (N.C. Gen. Stat. § 62-133(b)(1));
- and fix the fair return on the cost of that property (N.C. Gen. Stat. § 62-133(b)(4)).[1]

[1] *State ex rel. Utilities Comm'n v. Thornburg*, 325 N.C. 484, 490, 385 S.E.2d 463, 466 (1989) ("*Thornburg II*") ("Section 62-133 provides a step-by-step procedure for the Commission to follow in fixing these rates.")

The Commission is also required to consider "all other material facts of record that will enable it to determine reasonable and just rates." N.C. Gen. Stat. § 62-133(d).

The Commission's responsibility is to "fix such rates as shall be fair both to the public utilities and to the consumer." N.C. Gen. Stat. § 62-133(a). The statutory intent is that the Commission "fix rates as low as may be reasonably consistent" with Due Process constitutional considerations.[2] The burden of proof is on the utility to show that its proposed changes in rates are just and reasonable. N.C. Gen. Stat. §§ 62-75; 62-134 (c).

In determining whether certain costs constitute "reasonable operating expenses," the Commission can exclude costs that are not reasonable.[3] The evaluation of whether costs are reasonable, involves, among other things, an assessment of whether they were prudently incurred.[4]

The Commission has broad discretion to determine what constitutes "reasonable operating expenses" pursuant to N.C.G.S. § 62-133(b)(3).[5] The determination involves, among other things, an assessment of whether costs were prudently incurred.[6].

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[2] *State ex rel. Utilities Comm'n v. Duke Power Co*., 285 N.C. 377, 388, 206 S.E.2d 269, 276 (1974) ("*Duke Power*").

[3] *See State ex rel. Utilities Comm'n v. North Carolina Power*, 338 N.C. 412, 421-22, 450 S.E.2d 896, 901-02 (1994), cert. denied, 516 U.S. 1092, 133 L. Ed. 2d 758 (1996); *State ex rel. Utilities Comm'n v. Thornburg*, 316 N.C. 238, 257, 342 S.E.2d 28, 40 (1986).

[4] *See Thornburg*, 325 N.C. at 491-92, 385 S.E.2d at 467.

[5] *State ex rel. Utilities Comm'n v. Thornburg*, 325 N.C. 463, 475-77, 385 S.E.2d 451, 457-59 (1989) ("*Thornburg I*") (Commission may allow recovery from ratepayers of cancelled nuclear plant costs as reasonable operating expenses without return).

[6] *State ex rel. Utilities Comm'n v. North Carolina Power*, 338 N.C. 412, 421-22, 450 S.E.2d 896, 901-02 (1994), *cert. denied*, 516 U.S. 1092, 133 L. Ed. 2d 758 (1996) ("*North Carolina Power")*(Management imprudence is only one method of showing that a given expense is unreasonable); *State ex rel. Utilities Com. v. Carolina Power & Light Co*., 320 N.C. 1, 8-14, 358 S.E.2d 35, 39-42 (1987)(Test year data may be adjusted for abnormalities); *State ex rel. Utilities Comm'n v. Thornburg,* 316 N.C. 238, 257, 342 S.E.2d 28, 40 (1986) ("*Thornburg 1986")*; *Duke Power Co*., 285 N.C. at 394, 206 S.E.2d at 280

In assessing whether Duke Progress prudently incurred the coal ash costs for which it seeks cost recovery, there are two aspects to the analysis: 1) whether the utility acted prudently *over time* as coal ash was generated and stored, or if prior mismanagement or negligence by the utility has impacted the work that needs to be done now; and 2) whether or not the approaches *now being undertaken* to clean up and close the coal ash ponds are economical and prudent. The Commission commented on this two-pronged analysis of prudence when it considered a natural gas utility proposal for recovery of costs associated with the clean-up of manufactured gas plants – facilities that were no longer in use – and concluded that, among other factors, it would be pertinent to evaluate "whether the Company's initial operation of each site was prudent, [and] whether the clean-up costs were prudently incurred" in order to determine whether such costs should be passed on to ratepayers. For example, when the Commission considered a natural gas utilities proposal for recovery of costs associated with the clean-up of manufactured gas plants – facilities that were no longer in use – the Commission commented that, among other factors, it would be pertinent to evaluate "whether the Company's initial operation of each site was prudent [and] whether the clean-up costs were prudently incurred" in order to determine whether such costs could be passed on to ratepayers.[7]

In sum, when the Commission considers whether Duke's proposed coal ash costs are recoverable it needs to consider, among other things, whether the costs are reasonable and prudent. Many factors go into this determination, including, among other things, whether Duke acted prudently over time as the coal ash was generated and treated and

[7] *See* Order Granting Partial Rate Increase issued October 7, 1994 In the Matter of Application of Public Service Company of North Carolina, Inc. for an Adjustment of its Rates and Charges, Docket No. G-5, Sub 327 ("1994 Public Service Order") at 22, 31.

whether prior mismanagement is impacting work that needs to be done now and has resulted in increased costs.

Thus, Duke's view of prudence as it pertains to cost recovery is overly narrow. Duke seems to contend that the Commission can only disallow costs that constitute penalty amounts levied against it by an Agency or court in connection with its treatment of coal ash. However, the plain language of North Carolina utility law, as has been previously applied by the Commission, more broadly requires the Commission to disallow all costs that were imprudently or unreasonably incurred, as opposed to just disallowing a narrow subset of specific, legal penalties that were levied against it (which in the scheme of things are a mere drop in the bucket compared to the massive amount of coal ash related costs Duke seeks to recover). If the General Assembly had intended to disallow only penalties paid, it could have said so in the utilities law, but a plain read of the statute shows that this is not the framework set up by our General Assembly. In sum, Duke's imprudent treatment of coal ash over the years is clearly relevant to the Commission's determination of whether Duke is entitled to recover these costs.

B. <u>The Evolution of Industry Standards Regarding Coal Ash.</u>

Coal has been utilized for decades by the utilities industry to generate electrical power. Over time, the combustion of coal has "produce(d) substantial quantities of wastes." (Sierra Club Kerin Direct Cross Exhibit 1-1988 EPA Rpt. to Congress p ES-2/Off. Exh.17 p 251) These waste byproducts, known as "coal combustion residuals" or "CCRs" include fly ash, bottom ash, coal slag, and flue gas desulfurized gypsum. (AGO Wright Direct Cross Exhibit 2-Joint Factual Statement p 7/Off. Exh.14 p 232) CCRs contain "various heavy metals and potentially hazardous constituents." (*Id*.)

Historically, beginning in approximately 1950, Duke, as did many utilities, utilized unlined earthen impoundments or coal ash basins to deposit its CCRs as part of a waste treatment system at its power plants. Duke generally allowed its coal ash basins "to continue to store settled ash and particulate material for years or decades," only occasionally dredging the settled coal ash from the basins and storing the coal ash in dry stacks on plant property. (AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 8/Off. Exh.14 p 233)

In 1972, the Clean Water Act was enacted to prohibit the discharge of pollutants into waters of the United States except in compliance with a permit issued under the Act under the National Pollutant Discharge Elimination System ("NPDES") by the Environmental Protection Agency ("EPA") or by a state with an approved permit program. 33 U.S.C. 1251 *et. seq*. (1972). North Carolina was approved to issue such permits by the EPA in 1975. (AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 11/Off. Exh.14 p 236) Because coal ash and coal ash wastewater are considered pollutants, their disposal was allowed to be dispersed only through a point source approved by North Carolina's Department of Environmental Quality as identified in a NPDES permit. Duke, as required, acquired these type of permits for each of its power plants; such permits contain, but are not limited to, effluent limitations, water quality standards, monitoring and reporting requirements, standard conditions, and special conditions where appropriate. (AGO Wright Direct Cross Exhibit 2 – Joint Factual Statement pp 12-13/Off. Exh.14 pp 236-237 237; *see also* T15 pp 12-13)

By 1979, "[o]ne of the major environmental problems confronting the coal and uranium industries" was identified as the "disposal and reclamation" of coal and uranium wastes. (Public Staff Wells Cross Exhibit 4 - Los Alamos Rpt. p 1/Off. Exh.22 p 219) In an effort to determine the extent of the problem, the United States Department of Energy directed the University of California's Los Alamos Scientific Laboratory to prepare a paper on the topic. (Public Staff Wells Cross Exhibit 4 - Los Alamos Rpt./Off. Exh.22 pp 218-234) The report dealt with all aspects of coal waste, including the burning of coal and its attendant coal combustion wastes. (Public Staff Wells Cross Exhibit 4 - Los Alamos Rpt. pp 5-7/Off. Exh.22 pp 223-225) The author found that there was a "growing awareness that the discarded wastes from coal combustion [were] a serious potential source of surface and ground water contamination" and that the wastes "have the potential for causing great environmental damage if not properly handled." (Public Staff Wells Cross Exhibit 4 - Los Alamos Rpt. pp 2, 6/Off. Exh.22 pp 220, 224) The Report warned that a significant environmental problem facing the utilities industries was "[t]he control of contaminated leachates and seepages from disposal ponds for fly ash and scrubber sludge" and recommended "careful monitoring of the surface and subsurface effluents from disposal ponds." (Public Staff Wells Cross Exhibit 4 - Los Alamos Rpt. p 7/Off. Exh.22 p 225)

In 1981, the EPA confirmed that leaks and seeps were problems, and cautioned that all landfills and impoundments would eventually leak. (T15 p 31) Utility owners and operators have a duty to be diligent in detecting and correctly intervening when such leaks and seeps occur. (*Id.*) The NPDES permits clearly delineate this duty by requiring owners and operators to comply with the permit and the law; by requiring that they maintain and operate pollution control equipment in good working order; and by requiring that they quickly mitigate any discharge in violation of a permit. (T15 pp 15-16)

Use of coal grew significantly over the years, with over 60 million tons of coal ash produced annually in the United States in the mid 1970's, to about 69 million tons of coal ash and 16 million tons of flue gas desulfurization wastes generated in 1984. (Public Staff Wells Cross Exhibit 4 - Los Alamos Rpt. p 6/Off. Exh.22 p 224) By 1988, it was predicted that in 2000, annual coal waste would reach 120 million tons of coal ash and about 50 million tons of flue gas desulfurization waste. (Sierra Club Kerin Direct Cross Exhibit 1 - 1988 EPA Rpt. p ES-2/Off. Exh.17 p 251)

In 1988, the EPA reported to Congress that about four-fifths of all waste generated at coal-fired electric utility power plants has been "typically disposed in surface impoundments or landfills." (*Id.*) The EPA cautioned that the management of waste in surface impoundments "is often only indirectly addressed by state solid waste regulations." (Sierra Club Kerin Direct Cross Exhibit 1 - 1988 EPA Rpt. pp 4-8/Off. Exh.17 p 265) The Report specifically pointed out that North Carolina's solid waste regulations "exclude surface impoundments and defer to state water laws for regulatory authority" and that its water laws "do not include any design and operating requirements for surface impoundments." (*Id.*) Therefore, Duke, bound by the regulatory requirements specified in its NPDES permits that were subject to only limited regulatory oversight, had a responsibility and duty to (a) comply with the specific emissions levels specified in the permits, (b) not cause or allow to be generated a condition of environmental pollution and to mitigate it should it find one, and (c) keep all wastewater apparatus in good working order. (T15 p 100)

The EPA report further warned that "[t]he primary concern regarding the disposal of wastes from coal-fired power plants is the potential for waste leachate to cause groundwater contamination." (Sierra Club Kerin Direct Cross Exhibit 1 - 1988 EPA Rpt. p ES-3/Off. Exh.17 p 252) The EPA also found that it was a positive sign that "[l]ining (of surface impoundments and landfills) is becoming a more common practice (in the industry) … as concern over potential ground-water contamination from "leaky ponds" … has increased." (Sierra Club Kerin Direct Cross Exhibit 1 - 1988 EPA Rpt. pp 4-24, 4-25/Off. Exh.17 pp 281-282) However, unfortunately, Duke did not follow that common practice, and has only one lined impoundment, which is clay-lined, in its entire fleet to date.

Duke's internal documents demonstrate that it was directly aware at least as of 1985 that its unlined ash ponds create a risk of groundwater and surface water contamination. (AGO Fountain Cross Exhibit 8 - EPA Preliminary Hazardous Waste Site, Preliminary Assessment of Sutton/Off. Exh.8 pp 403-409)

C. Duke's Failure to Keep Pace With Industry Standards Regarding Coal Ash.

The State of North Carolina took a step forward to protect ground-water contamination in June 1979, when it enacted Subchapter 2L, providing groundwater classification and standards to better maintain and preserve the quality of the ground waters of the State, including those associated with the utilities industry through its NPDES permits. Duke had a lackadaisical response to these new standards:

> Importantly, even after the corrective action requirements were added, there was no obligation in the 2L rules to *monitor* groundwater quality. The only obligation was to take corrective action once exceedances had been identified. However, groundwater monitoring requirements were not immediately added to all of the Company's NPDES permits. As a result the Company was under no universal obligation to monitor for groundwater impacts, and only did so as required by site-specific conditions.

(T21 p 68) Although it voluntarily began monitoring groundwater at Sutton in 1984, and Roxboro in 1987, it had to be forced to do so at Weatherspoon in 1990, and the remaining sites in or around 2006 when the Department of Environment and Natural Resources added groundwater requirements to the remainder of Duke' NPDES permits when those permits were reissued or modified. (T21 p 93) It was not until 2008 that the Company began fully "working with the Department to move through the assessment and corrective action process." (T21 p 69)

Duke has a long history of not meeting industry standards in dealing with coal-ash related issues. An early—and very costly—failure occurred at its Roxboro plant from 1966 to 1990 at the Hyco Reservoir when it sent contaminated effluent from coal ash disposal basins into the Reservoir.

> High levels of the trace element selenium bioaccumulated in aquatic food chains . . . , poisoning invertebrates and fish in the lake, particularly species of sport fish . . . , causing reproductive failure and severe declines in fish populations in the late 1970's and early 1980's. Consequently, from 1988-2001 the North Carolina Department of Health and Human Services issued a consumption restriction advisory for selenium contamination in fish from the reservoir. … As of 2005, concentrations of selenium in fish tissues remained above a toxic threshold even with reduced influx of selenium, due to migration of the element from contaminated sediments to benthic food chains. The total monetized value of damage can be divided among ecologic factors (*e.g.*, major impacts on fish), recreational factors (*e.g.*, fishing trips not taken), depreciated real estate values, aesthetic factors, and human health damages (*e.g.* losses due to stress and anxiety from knowing ecosystem is poisoned) and is estimated at $877 million.

(AGO Wright Direct Cross Exhibit 1 - CCR Rule p 21363/Off. Exh.14 p 87)

This case garnered national attention, and the Environmental Protection AGOency cited it as a proven damage case in support of the provisions finalized in its 2015 Coal Combustions Rule.

In August 1996, Duke's predecessor entered into standstill Agreements with two of its insurance carriers, AEGIS and Lloyd's of London, acknowledging its potential legal exposure for pollutant discharges from coal combustion residuals ponds at its coal-fired power stations. (AGO Fountain Cross Exhibits 4, 5 - Standstill Agreements/Off. Exh.8 at 336-343, 344-370) The company's 1996 acknowledgement is confirmed by the results of dam safety inspection reports going back to the 1990's and beyond. (T15 p 30) Notably, the 1997 dam safety inspection report for Asheville plant recognized that issues regarding unpermitted seeps at the Asheville plant had been identified as early as 1964, without Duke pursuing any corrective action. (T15 pp 30-31) The issue of seeps and their ramifications were discussed with more particularity in the Joint Factual Statement in the federal criminal case against Duke and its co-defendants. (AGO Wright Direct Cross Exhibit 2 pp 41-44/Off. Exh.14 pp 266-269) It was noted that nearly 200 distinct seeps at the defendants' coal ash basins had been identified in permit modification applications filed in 2014. (AGO Wright Direct Cross Exhibit 2 p 42/Off. Exh.14 p 267) Noting that seeps may transport pollutants, that all of the North Carolina plants had seeps, and that some of these seeps had entered waters of the United States through discrete conveyances, the Statement further found as a fact that:

> At various times between 2010 and 2014 the Defendants included general references to seeps in correspondence and permit application with DENR and disclosed more detailed information concerning certain seeps, including engineered seeps (*i.e.*, man-made channels). The Defendants did not begin gathering and providing detailed, specific, and comprehensive data concerning seeps, and particularly seeps discharging to waters of the United States, at each of the North Carolina coal ash basins to DENR until after the DAN RIVER spill in 2014.

(AGO Wright Direct Cross Exhibit 2 pp 42-44/Off. Exh.14 pp 267-269). Mr. Wittliff, an engineer with over 30 years of experience, testified that Duke's practice of "creating ditches or channels to conduct seepage away from the impoundments and into the waters of the United States via unpermitted discharge points" was "contrary to reasonable and prudent industry practice." (T15 p 32)

Other similar examples of Duke' failure to meet industry standards in the late 1990's and early 2000's by not implementing safeguards to prevent seeps and other coal-ash related problems occurred at the H. F. Lee Plant, the Roxboro Plant, and the Mayo Plant. At the H. F. Lee Plant, the 1999 third party dam safety inspector found open cracks in the asphaltic concrete wave protection blanket near the spillway of the cooling pond; cut trees growing on the lower sections of the exterior slopes of both ponds; vegetation growing in both ash ponds; and the pH operating level for one of the ash ponds was too low. In 2004, five years later, the inspector found that those same problems had not been repaired and still existed. (T15 pp 32-33- HF Lee dam safety rpts./Off. Exh.15) pp 20-242)

At the Roxboro Plant, the inspector who performed the 1993 and the 1998 dam safety inspections found seepage coming from the West Ash Pond, and, although the drawings indicated that there was supposed to be a decanting pipe in that area, the inspector could not locate it. In 2003, an inspector found three small slides in one of the dikes and recommended placing rip rap there to repair it. Duke did not perform any of these recommended repair until four years later. (T15 p 33- Roxboro dam safety rpts; Off. Exh.15 pp 455-650)

At the Mayo Plant, the 1999 dam safety inspection identified localized erosion occurring on the downstream slope of the ash pond dam and steady-state seepage conditions; five years later in 2004, the inspector continued to observe the seepage which had not been repaired. (T15 p 34 - Mayo dam safety rpts./Off. Exh.15 pp 243-454) All of these actions showing Duke' failure to meet industry standards of implementing safeguards to prevent seeps and other coal-ash related problems from occurring are signs of its imprudent behavior. Testifying about Duke's dam safety reports between 1995 and 2008, Mr. Wittliff stated that the examples of Duke's "management of its impoundments as wastewater treatment units and its allowance of seepages to not adhere to industry standard and was not reasonable or prudent." (T15 p 32)

In 2002, North Carolina enacted a law to protect its air from contamination through the utilities' smokestacks, both in and out-of-state. The Clean Smokestacks Act provides a year-round cap on overall nitrogen oxide and sodium dioxide emissions from its major utilities and was stringent enough to require cleanup or retirement of all forty-five of Duke Energy's coal-fired units. As more coal ash was recaptured, more coal combustion residuals came into existence, and a continuing need to be diligent in how those residuals were stored and disposed of became even more critical. Despite being aware of this trend in the growing amount of coal ash, Duke opted to use lower cost fuel alternatives such as higher ash coals, Venezuelan coal, and opportunity coal, knowing that the use of such fuels would further "increase the ash production" of its plants. (AGO Wells Cross Exhibit 3 - 2004 Sutton ash strategy study p 2/Off. Exh.22 p 169)

Based on several factors, including the increased production of coal ash, Duke became aware that the Sutton Plant was running out of capacity in its 1984 coal ash pond in 2004 and would not last the anticipated 25 years. (AGO Wells Cross Exhibit 3 - 2004 Sutton ash strategy study p 1/Off. Exh.22 p 168) In fact, in its Long Term Ash Strategy Study Phase Report dated November 1, 2004, the author noted:

> The 1984 ash pond is currently estimated to be non-operational due to Total Suspended Solids limit exceedance which will cause a violation of the NPDES permit. The ash pond is expected to be un-operational by June, 2006. The Sutton Plant and East Region Engineering have been implementing temporary solutions that have allowed the plant to operate at this point.

Further issues noted were as follows:

> 1983 Pond is Unlined – . . . The current environmental atmosphere is that these ponds will eventually have to (be) emptied and placed in a lined containment to eliminate the leaching of the ash products into the ground water system. This is an issue that is not currently being pressed, but it is anticipated that with the tighter environmental conditions it will soon become an emergent issue. This issue is aggravated by the fact that a test monitoring well located 300' from edge of the 1983 ash pond has shown high levels of arsenic during the past two quarterly tests. … There is also a county well water source approximately 1200' from the test well that is monitored by the county.
>
> …
>
> It is assumed that the North Carolina Division of Water Quality will require the 1983 ash pond to be emptied and lined to comply with current ash pond regulations. For the purpose of this study it is estimated that there is a 5% chance annually of the ash pond required to be relined starting 2007, and that in 2013 there will be a 10% chance annually thereafter until 2019.

(AGO Wells Cross Exhibit 3 - 2004 Sutton ash strategy study pp 2-3/Off. Exh.22 pp 169-170)

This internal study by a Duke engineer clearly demonstrates that in 2004 Duke was aware that its unlined ash impoundments were creating an environmental hazard and that it anticipated the development of laws that would require ash to be excavated and stored in lined impoundments. Instead of correcting these problems, Duke chose to ignore them. It is noteworthy that Duke did not choose to build a new impoundment, did not excavate the existing impoundments, and eventually paid millions of dollars in settlement of a notice of violation for groundwater violations, including exceedances of arsenic and total suspended solids at the Sutton Plant. (Public Staff Wright Rebuttal Cross Exhibit 6 - 2015 Sutton penalty assessment pp 5-7/Off. Exh.21 pp 578-579) If Duke had acted proactively, rather than ignoring the issues it was facing, the cost of correcting the issues in 2004 would have been far less than the costs are now and will be in the future.

The 2004 Sutton ash strategy document is particularly telling because it highlights that Duke was reluctant to close ash impoundments and build new ones out of concern that it would be required to build new impoundments in ways that would be more protective of the environment. This is further evidence of Duke's failure to manage coal ash appropriately. As Mr. Wittliff explained, the age of Duke's impoundments is itself imprudent. (T15 p 46) He noted that Duke's impoundments received coal combustion residuals for decades before being taken out of service. (T15 p 45) Mr. Wittliff testified: "Allowing an impoundment to operate for this length of time, before or without restoring the capacity of the water treatment unit, is contrary to the requirement to maintain the efficacy of pollution control devices and, therefore, is in no way responsible, reasonable, or prudent." (T15 p 46)

In 2008-09, Duke had another opportunity to act proactively when faced with a national crisis due to the Tennessee Valley Authority's Kingston Fossil Plant dam failure and the catastrophic coal ash spill that occurred. As a direct result of that spill, in February, 2009, the North Carolina Utilities Commission requested that all utilities provide a status report on the condition of their ash impoundments and a review of the procedures in place in order to prevent a coal ash spill from happening in North Carolina. (Wittliff Exhibit 3.0 (Feb 2009 NCUC transcript)/Off. Exh.15 pp 651-697) Duke reported to the Commission that it had safeguards and policies in place that would ensure that a coal ash spill would not occur in North Carolina at its facilities. (*Id.*) Upon learning that the Environmental Protection Agency had inspected several of Duke's power plants with negative findings, the Commission recalled Duke back in to report in October 2009. (Wittliff Exhibit 3.1 - Oct 2009 NCUC transcript/Off. Exh.15 pp 698-728) The Environmental Protection

Agency had rated seventy-five percent of the Company's ash ponds inspected by the Environmental Protection Agency (five of its ponds at the Cape Fear Plant and an inactive pond at its Asheville Plant) as poor. (Wittliff Exhibit 3.1-Oct 2009 NCUC transcript p 4/Off. Exh.15 p 701) Duke reported to the Commission that the Poor ratings were largely due to inadequate maintenance such as an excess of vegetation growth and lack of documentation of structural designs. (*Id*.) However, when asked about the EPA's notation that "POOR also applies when further critical studies or investigations are needed to identify any potential dam safety deficiencies," Duke conceded that "[t]he EPA recommended structural documentation to be completed for both Asheville and Cape Fear." (Wittliff Exhibit 3.1-Oct 2009 NCUC transcript pp 7, 9/Off. Exh.15 pp 704, 706)

The Duke representative speaking during the October 2009 Staff Conference downplayed the "Poor" EPA ratings to the Commission, stating that he considered the recommendations from the EPA not to be mandates, because, in his view, if the EPA thought the public was endangered it would "'make sure you complied.'" (T15 p 39). Mr. Wittliff testified that in his more than thirty years dealing with environmental compliance "I have never encountered such a dismissive attitude from a member of the electric power industry toward a serious report by the Environmental Protection Agency. Not only is it unwise, it is also irresponsible and unreasonable." (T15 p 30-41)

Unfortunately, instead of learning from its negative assignations from the Environmental Protection Agency, Duke continued on a path of imprudence in the operation and maintenance of its coal-fired power plants. In 2013, the North Carolina Department of Environment and Natural Resources and numerous environmental groups brought injunctive actions in Wake and Mecklenburg Counties in May and August of 2013 based on allegations of both ground-water and surface water violations at each of the Duke Energy sites. As a result of the subsequent enactment of the Coal Ash Management Act, the North Carolina Superior Courts granted Defendant's Motions for Partial Summary Judgment, requiring Duke to follow the mandates of the Act as part of the Court Order. (Wittliff Exhibits 5.3 and 5.4; Off. Exh.15 pp 866-965)

Based on actions occurring from at least 2010 through December 31, 2014, Duke pled guilty in federal court to criminal negligence on May 15, 2015 and admitted that it failed "to exercise the degree of care that someone of ordinary prudence would have exercised in the same circumstances" at three of its coal-fired power plants:

(1) At its H. F. Lee Energy Complex, Duke pled guilty to violating its NPDES permit by allowing unauthorized discharges of pollutants from coal ash basins via multiple seeps to flow into an engineered ditch and discharging pollutants into the Neuse River without obtaining or maintaining the necessary permits for over four years, from at least October 1, 2010 through December 30, 2014. (AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 47/Off. Exh.14 p 272) For this crime, Duke was fined the sum of $3.9 million. (AGO Wright Direct Cross Exhibit 3 - sentencing hearing transcript p 116/Off. Exh. 14 p 420)

(2) At its Asheville Steam Electric Generating Plant, Duke pled guilty to violating its NPDES permit by allowing multiple seeps to flow from engineered toe drains at its 1964 coal ash basin and discharging pollutants into the French Broad River without obtaining or maintaining the necessary permits for a minimum of three and a half years, from at least May 31, 2011 through December 30, 2014. (AGO Wright Direct Cross Exhibit 2 - Joint Factual

Statement p 50/Off. Exh.14 p 275) For this crime, Duke was fined the sum of $3.5 million. (AGO Wright Direct Cross Exhibit 3 - sentencing hearing transcript p 116/Off. Exh.14 p 420)

(3) At its Cape Fear Generating Station, Duke pled guilty to two charges of violating its NPDES permit by failing to inspect the risers within both its 1978 and 1985 coal ash basins for more than two years, from at least January 1, 2012 through January 24, 2014. (AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 41/Off. Exh.14 p 266) For this crime, Duke was fined the sum of $7 million. (AGO Wright Direct Cross Exhibit 3 - sentencing hearing transcript p 116/Off. Exh.14 p 420)

It is noteworthy that the condition of both of the risers at the Cape Fear coal ash basins were described as "marginal" as early as 2008, when it was estimated that the risers were "likely to develop problems" in two to five years from the date of the 2008 report. (AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 33/Off. Exh.14 p 258) Despite several years of warnings that the risers and skimmers were damaged, deteriorated, and tilted, the risers were not repaired or replaced from January 2012 through March 2014. (AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 35/Off. Exh. p 260) The lack of attention to these risers is strikingly similar to the lack of attention paid to the requested video inspection of the pipes at Dan River before the spill and demonstrates an imprudent attitude towards the operation and maintenance of its coal ash impoundments.

Duke knowingly maintained its ash impoundments in a state likely to result in environmental contamination. Further, in reference to the 200 identified seeps found at all seven of Duke's North Carolina facilities since at least 2010, Mr. Kerin testified that "at a retired site, the first thing you want to do is start removing the water. That improves the factors of safety on the dam. It also, if you would have seep issues, that will eliminate the seeps." (T16 pp 173-174) Despite that knowledge, when questioned by Commissioner Clodfelter, Mr. Kerin admitted that Duke did not dewater the basins at Cape Fear, H.F. Lee, Robinson or Weatherspoon; it merely stopped sluicing ash to those basins and moved those sluice lines over to newer vintage basins. (T17 pp 116-117) Mr. Kerin acknowledged that instead of mechanical dewatering, the basins dewatered over time, without a cap, the excavation of any of the ash in the basin, or any leachate collection system being installed. (T17 pp 117-118) Mr. Kerin further admitted that at no time after 1985 or 1988, did the Company take any additional actions with respect to those basins other than performing inspection of the dams. (T17 pp 118-119)

Further, when Duke sent its Ash Basin Strategic Action Team to all of its sites to determine the status of each in the wake of the Dan River catastrophic spill in 2014, the Team found that six of its eight plant sites required repair or some kind of work in order to meet the minimum federal factors of safety or stability assessment. (AGO Kerin Direct Cross Exam Exhibit 1 - Kerin Deposition/Off. Exh.17 pp 157-158; *see also* T16 pp 155-158)

Despite its entry into a plea agreement in federal court which specifically requires that the company receive no new enforcement actions for a period of five years, Duke has received three notices of violation at its Asheville Plant during this probationary period (violation of its structural fill permit, violation of the Sedimentation Pollution Control Act, and violation of its Construction Stormwater Permit). (Public Staff Kerin Rebuttal Cross Exhibit 1 - Apr 2017 CAM Rpt./Off. Exh.20 pp 199-233; *see also* T15 p 56) As Mr.

Wittliff testified, Duke's notices of violation during a period of time when it is under increased scrutiny and is actually on probation for criminal environmental violations, is another example of its imprudent behavior. (T15 p 56)

In the face of the foregoing facts, Duke's position is that it has always adhered to industry standards and prudently managed its coal ash. Mr. Kerin stated that: "[a]t each step in the environmental regulatory evolution process, DE Progress was in line with industry standards and reasonably and prudently managed CCRs and its coal ash basins." (T16 p 109) Mr. Wells stated that "the Company, and the utility industry as a whole, has taken appropriate steps to assess and manage groundwater and seeps at these sites for decades." (T21 p 62) However, neither of Duke's witnesses here had dealt with coal ash management at the Duke sites prior to the Dan River spill and neither had training or experience in environmental management prior to that time. (T16 p 151; T21 p 61) In contrast, Mr. Wittliff, a mechanical engineer with more than 30 years of experience in the world of coal-fired power utilities, having reviewed the dam safety inspection reports going back to the 1990's, the State and Federal court documents in which Duke is a defendant, as well as other relevant documents, has a completely opposite opinion: that Duke's actions and failure to act demonstrate imprudent behavior. (T15 pp 18-22)

D. <u>Duke's Own Failures Led To Legislative and Court-ordered Remediation Requirements.</u>

1. <u>The legislature enacted the Coal Ash Management Act as a response to long-term coal ash mismanagement by Duke Energy Carolinas and Duke Energy Progress culminating in the February 2014 Dan River coal ash spill.</u>

Duke's imprudence led to the enactment of North Carolina legislation containing tight remediation requirements. On May 15, 2014, in the first draft of the Coal Ash Management Act, the legislature clearly identified the Dan River catastrophic coal ash spill as the impetus for its enactment and acknowledged that the issue of coal ash storage needed to be more adequately addressed. (Public Staff Wright Rebuttal Cross Exhibit 4 - CAMA Preamble/Off. Exh.21 p 557) The legislature identified the Duke sites of Sutton and Asheville as high priority sites which required accelerated closure of impoundments at those plants. The General Assembly wrote that "the issue of coal ash storage has not been adequately addressed in North Carolina for more than six decades." (T15 p 30) Public Staff witness Lucas testified that the CAMA legislation has "a strict schedule for closures that to the knowledge of the Public Staff is unmatched by any legislation in any other state." (T18 p 284). Mr. Wittliff concurred that no surrounding state, including Virginia, South Carolina, Georgia, Tennessee, West Virginia, or Kentucky, has enacted a law like CAMA. (T15 p 65)

Further, CAMA specifically cautions the Commission that it should "not allow an electric public utility to recover from the retail electric customers of the State costs resulting from an unlawful discharge to the surface waters of the State from a coal combustion residuals surface impoundment." N.C. Gen. Stat. § 62-133.13 (2014) This section of the act applies to discharges occurring on or after January 1, 2014. N.C. Gen. Stat. Session Law 2014-122, Sen. Bill 729, Part I, § (1)(b). Although it is not possible, based on the record, to determine exact disallowances due to a lack of information regarding cost specificity provided by Duke, there are certainly costs being requested by Duke that would have resulted from the unlawful discharges to the surface waters of the State from the Asheville and H.F. Lee plants cited in the Federal criminal cases from January 1, 2014 to December 30, 2014. (AGO Wright Direct Cross Exhibit 2 - Joint Factual

Statement p 47/Off. Exh.14 p 272; AGO Wright Direct Cross Exhibit 2 - Joint Factual Statement p 50/ Off. Exh.14 p 275)

Thus, Duke is off-base when it portrays CAMA as a run-of-the-mill regulatory action by the General Assembly that had nothing to do with its prior conduct. CAMA was specifically enacted as a result of Duke's failure to adequately address coal ash storage. It was not enacted out-the-blue, in a complete vacuum. CAMA specifically reflected the heightened concerns brought about by the Dan River event and other problems that came to light afterward.

2. The Environmental Protection Agency's Final CCR Rule arose from Groundwater Contamination from CCR Landfills and Surface Impoundments, Including Those in North Carolina.

The long-anticipated federal CCR regulations became law effective on October 14, 2015. (AGO Wright Direct Cross Exhibit 1 - CCR Rule/Off. Exh.14 p 26) The final CCR Rule "establishes minimum national criteria for CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units including location restrictions, liner design criteria, structural integrity requirements, operating criteria, groundwater monitoring and corrective action requirements, closure and post-closure care requirements, and recordkeeping, notification, and internet posting requirements." (AGO Wright Direct Cross Exhibit 1 - CCR Rule p 21303/Off Exh.14 p 27) The Environmental Protection Agency has been reviewing CCR landfills and surface impoundments for years, especially after the Tennessee Valley Authority's Kingston coal ash spill in 2008. During that investigation and as part of the basis for the promulgation of its Final CCR Rule, it has identified groundwater contamination as "one of the key environmental and human health risks … (associated) with CCR landfills and CCR surface impoundments." (AGO Wright Direct Cross Exhibit 1 - CCR Rule p 21396/Off. Exh.14 p 120) Therefore, "EPA's longstanding and consistent policy across numerous regulatory programs has been that groundwater contamination is a significant concern that merits regulatory action in its own right, whether or not the aquifer is currently used as a source of drinking water. Sources of drinking water are finite." (AGO Wright Direct Cross Exhibit 1 - CCR Rule p 21455/ Off. Exh.14 p 179) The EPA also specifically identified North Carolina in the Rule for the damAGOe case associated with the Roxboro Plant's Hyco Reservoir discussed hereinabove and for the "catastrophic" release in 2014 at Dan River. (AGO Wright Direct Cross Exhibit 1 - CCR Rule p 21457/Off. Exh.14 p 181) Like CAMA, the EPA's final CCR regulations did not come about out-of-the-blue but specifically came about due to groundwater contamination from CCR landfills, including those in North Carolina.

E. Duke' Failure to Manage Coal Ash Properly Resulted in Greater Costs.

Duke's failure to properly manage coal ash resulted in both a problem it had to fix and greater costs needed to fix that problem.

1. Dan Wittliff Testimony Regarding Coal Ash Costs.

Dan Wittliff, a professional engineer and an expert in the area of coal-ash management, testified that although unable to determine exact disallowances due to a lack of information regarding cost specificity provided by Duke, it is his opinion that the costs associated with coal-ash closures were significantly higher than they would have been had Duke only had to meet the requirements of the Federal Coal Combustion Residuals Rule. As noted, CAMA reflected an assessment by the General Assembly that it could no longer presume that Duke would manage its property appropriately to protect the environment, and stepped in to direct specific measures and an accelerated timeline. The Coal Ash Management Act's identification of the Asheville and Sutton Plants as High Priority sites resulted in accelerated schedules at those plants that would not have been imposed under the Federal Coal Combustion Residuals Rule. (T15 p 52) As is apparent from Kerin's Direct Testimony, Exhibit 11, (Off. Exh.16 p 269) approximately 72% ($223,834,746 out of the total ARO expenditures of $311,419,788) of the monies spent by Duke in 2015-2016 were for those two sites due to those accelerated schedules. At Sutton, for example, in an attempt to meet deadlines, Duke advised that it transported approximately 2 million tons of coal combustion residuals off-site as structural fill to the Brickhaven Clay Mine in Chatham County, North Carolina, with transportation alone being between 34-58 percent of the total off-site disposal or storage costs. (T15 p 55) Therefore, it is Mr. Wittliff's opinion that the accelerated schedules of the Coal Ash Management Act for the high priority sites caused Duke to incur significantly greater costs than it would have incurred if it only needed to adhere to the Federal Coal Combustion Residuals Rule. (*Id*.)

2. Garrett and Moore Testimony Regarding Costs of Closing of the Sutton and Asheville Sites.

Garrett and Moore are registered professional engineers with many years of experience engineering coal ash management projects, including the closure of coal ash impoundments. (T18 p 133) They reviewed the approach taken by Duke to determine if it was the least cost method of achieving compliance with the laws and regulations governing coal ash management. (T18 p 135) In reviewing the Sutton Plant site, they determined that if Duke had pursued the development of an on-site landfill on the same start date as it pursued the development of the Brickhaven structural fill project, it could have complied with CAMA timelines and avoided substantial transportation costs for the hauling of approximately two million tons of ash. They opined that the imprudent and unreasonable costs associated with the Sutton Plant that should be disallowed are $80.5 million. (T18 p 180)

In reviewing the Asheville Plant site, Garrett and Moore found that Duke was unable to provide reports or documentation demonstrating that an on-site landfill was not feasible, especially given the knowledge of the substantial costs involved in transporting coal ash off-site. Further, they found that excess costs occurred because coal ash was moved twice – once on-site, and again when taken off-site. (T18 pp 182-83) In addition, the cost of using a landfill in Homer Georgia was unreasonable given the closer proximity and lower cost of using the landfill at Cliffside. (T18 pp 182-83) They opined that the imprudent and unreasonable costs associated with the Asheville Plant that should be disallowed is $29.3 million. (T18 p 183)

3. Jay Lucas Testimony Regarding $6.7 Million for Groundwater Extraction and $88,000 in Litigation.

Jay Lucas, a professional environmental engineer and a member of the North Carolina Public Staff, advised that although unable to determine exact disallowances due to a lack of information regarding cost specificity provided by Duke, it is his opinion that the "environmental compliance" costs are, in fact, costs which would have been incurred to clean up Duke' environmental groundwater violations even without the benefit of the Federal CCR Rule or CAMA. (T18 pp 339-340) Mr. Lucas maintains that Duke "is culpable for environmental violations because the Company failed to meet its legal duty to protect ground and surface waters." (T18 p 340) Because of that culpability, Mr. Lucas determined that the Commission should disallow "$6.7 million of costs for extracting and treating contaminated groundwater." (T18 p 339) Further, Mr. Lucas opines that the

Commission should disallow an additional $88,000 in outside litigation costs incurred in actions "where there is strong evidence of environmental violations." (T18 p 339)

4. Kevin O'Donnell Testimony Comparing Duke's Coal Ash Costs to Other Situations.

Kevin O'Donnell opined that Duke should be able to recover only the "normal course of business" coal ash cleanup costs. (T15 p 149) He equates the "normal" costs with those that the Company would have incurred under the Final Coal Combustion Residuals Rule, not those incurred under the Coal Ash Management Act which are the result of the Company's mismanagement of its coal ash ponds – an opinion shared by Mr. Wittliff. (T15 pp 25, 149) Mr. O'Donnell compared AROs on the books of utilities from across the country and researched the 2016 financial statements of the 25 utilities with the highest AROs to segregate the coal ash AROs from other items not related to coal ash. (T15 pp 150-151) In doing so, Mr. O'Donnell found that the Duke Energy AROs specific to coal ash are MUCH greater than the coal ash AROs from other utilities. (T15 p 152) It is noteworthy that Duke did not provide for presentation in this case any objective analysis comparing its costs for coal ash remediation to other utilities.

F. Duke Has Not Met Its Burden of Showing that the Coal Ash Costs it Seeks to Recover Are Reasonable and Prudent.

As noted above, the burden is on Duke to show that it is entitled to recover the massive coal-ash related costs it seeks to recover and to show that those costs were reasonably and prudently incurred. Duke has not met its burden. The record shows that Duke failed to keep pace with industry standards and did not appropriately address coal ash storage issues. Duke's imprudent actions directly resulted in the passage of CAMA; CAMA was not some regulatory requirement that came about out-of-the blue or in a vacuum. Likewise, Duke's imprudent treatment of coal ash resulted in a problem that it needed to fix and larger costs than should have been necessary to fix the problem. This problem and responsibility, and the costs for fixing it, should fall on Duke, not on consumers.

Duke contends that the coal ash closure costs are driven by changes in governmental regulations, but the fact that regulatory requirements have changed does not eliminate the consideration of how coal ash ponds were managed historically – and whether operations were or were not prudent. To the contrary, the Commission has recognized that imprudence may stem from management failures that occur over a period of years, and that the failure of the utility to maintain quality operations even in the absence of strict regulation is not reason to ignore the utility's errors after there is a change in regulation.[8]

Duke argues that the recovery of environmental compliance costs has been allowed in other contexts and should be allowed in this case, but there are important distinctions involved in this case. First of all, as noted above, passage of the laws and regulations at issue is directly attributable to Duke's unlawful and imprudent behavior.

Second, in the 2016 Dominion general rate case, the Commission allowed recovery of some coal ash costs and deferral for consideration of future costs in a later general rate case.[9] The Commission did not find that there was substantial evidence that Dominion's costs were imprudently incurred, and the determination was allowed under the

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[8] *Order Granting Partial Increase in Rates and Charges,* Docket. Nos. E-2 Sub 537, E-2, Sub 333 Issued August 5, 1988 (*"1988 Harris Order"*) at 93-97.
[9] *See* Order Approving Rate Increase and Cost Deferrals and Revising PJM Regulatory Conditions *In the Matter of Application by Virginia Electric & Power Company, d/b/a Dominion North Carolina Power, for Adjustment of Rates and Charges Applicable to Electric Utility Service in North Carolina*, issued 22 December 2016 in Docket No. E-22, Sub 532 ("*2016 Dominion Rate Order")*

circumstances presented in that case without precedential effect regarding the treatment of coal ash costs in future proceedings.[10]

Finally, as to the Smokestacks legislation referenced by Duke, the environmental costs were related to improvements made to operating coal plants, rates were frozen—not increased—under the deferral mechanism, and specific statutory authorization was provided for the rate mechanism. (T13 p 371) *See* N.C. Gen. Stat. § 62-133.10. Here, most of the costs pertain to retired plants, Duke proposes substantial rate increases for cost recovery, and there is not specific statutory authority for a special rate mechanism. N.C. Gen. Stat. § 62-133.13*; see* Kerin Exhibit 11; Maness Late-Filed Exhibit. Similarly, specific statutory authorization has been enacted for deferral and cost recovery of fuel and fuel-related costs, N.C. Gen. Stat. § 62-133.2, and for natural gas pipeline safety management costs. N.C. Gen. Stat. § 62-133.7A.

G. <u>There Are Additional Problems With Duke's Request for Recovery of Coal Ash Costs, Including Problems that Are Related to Its Handling of Insurance Coverage Matters, Accounting Treatment of Such Costs, and Proposal To Shoehorn Such Costs Into An Annual Fuel Rider Proceeding</u>

1. <u>Ratepayers Should Not Bail Duke Out from its Failure To Pursue Insurance Coverage for Coal Ash Costs.</u>

In addition to its imprudence in managing coal ash waste, Duke has not behaved in a reasonable and prudent manner in seeking recovery of coal ash costs from its insurers. In what it terms the "Insurance Case," the Company has filed suit against a number of insurance companies, seeking to recover under nineteen separate excess-level third-party liability insurance policies issued to its predecessor, Carolina Power & Light Company, between 1971 and 1986 for coal ash related costs. (Duke Late-Filed Exhibit No. 1 p 1) The

[10] 2016 Dominion Rate Order at 63.

Company emphasizes that it believes it has a strong claim. (Duke Late-Filed Exhibit No. 1 p 2) It has long been recognized in North Carolina law that a general liability policy that covers property damage, nothing else appearing, applies to injury to the state's natural resources.[11]

In summarizing the case for the North Carolina Business Court, where it is pending, the Company stated that "[l]iability has been imposed on Duke by the North Carolina Coal Ash Management Act ("CAMA") and a recent United States Environmental Protection Agency rule regarding CCR's. . . ." (T7 p 372; AGO Fountain Cross Exhibit 1 p 2) The Company summarized the case for the North Carolina Business Court as an enforcement of "its contractual rights to insurance coverage under certain occurrence-based excel-level third-party liability insurance policies sought by defendant insurers to Duke from 1971 to 1986." (T7 pp 371-72; AGO Fountain Cross Exhibit 1 p 1) The Company contends that the insurers are liable for occurrences that happened during the policy period, even if the liabilities arise decades later. (T7 p 372; AGO Fountain Cross Exhibit 1 p 2) In the Insurance Case the Company asserted that "Duke is legally compelled to investigate and remediate alleged or actual environmental property damage caused by coal combustion residuals ("CCRs"), at 14 coal-fired power plants in North Carolina and one coal-fired power plant in South Carolina.[12]" (T7 p 372; AGO Fountain Cross Exhibit 1 p 2)

The coal ash related costs for which the Company seeks recovery in the Insurance Case "overlap" with the coal ash related costs it seeks to recover in rates in this case, (T7 p 421), and when the AGO sought clarification of those costs, the Company referred the

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[11] *See C.D. Spangler Constr. Co. v. Industrial Crankshaft & Engineering Co.*, 326 N.C. 133, 155, 388 S.E.2d 557, 571 (1990).
[12] As noted, both Duke Energy Progress, LLC, and Duke Energy Carolinas, LLC, are plaintiffs in the Insurance Case.

AGO to the allegations in the complaint in the Insurance Case, stating that the nature of its CCR liability includes CAMA and the EPA CCR rule. (AGO Fountain Cross Exhibit 2, response to Data Request AGO 1-36) The Company is seeking coverage for remedial actions required under CAMA including removal of CCRs from impoundments, placing impermeable caps on impoundments, conducting groundwater monitoring, implementing corrective action to restore groundwater quality, providing permanent water supplies to residents near CCR impoundments, and the costs associated with commercial reuse of ash (i.e., beneficiation). (T7 pp 380-84; AGO Fountain Cross Ex. 3)

The Company states that, depending on how many occurrences an insurer must pay under a multi-year policy, the total amount available from all of the policies sued upon by CP&L in the Insurance Case "may total approximately" between $172 million to $200 million per occurrence. (Duke Late-Filed Exhibit No. 1 p 1) The Company notes that while there is "substantial litigation risk;" "it is possible that net recovery on behalf of the DEP ratepayers could amount to as much as $300 million dollars…" (Duke Late-Filed Exhibit No. 1 p 2)

The Company's position is that its recovery—if any—in the Insurance Litigation should be passed on to ratepayers. Dr. Julian Wright testified as follows:

> The Company has filed insurance litigation. When and if those monies materialize, customers should see the benefit of those proceeds. . . . It would be appropriate for the Commission to monitor these cases and ensure that any outcome benefits customers. It is my understanding that the Company has no objection to that approach.

(T13 p 385)

The Company's passivity in pursuing insurance proceeds is evident in witness Wright's use of the phrase "[w]hen and if those monies materialize." Hundreds of millions of dollars in insurance proceeds don't simply "materialize."

Currently, the Company is disinterested in the outcome. The Company's position is that the costs of the Insurance Case should be recovered in rates. (T7 p 464) If it recovers insurance proceeds, it plans to use those to offset the amounts it is otherwise asking to recover in rates. In short, if the Commission accepts the Company's proposal, there is no upside to the Company for prevailing in the Insurance Case, and there is no downside if it loses. The Company does not view itself as a stakeholder in the outcome, but, in its own words, merely as "advocates" for its customers. (T6 p 243)

Duke's inattention to the Insurance Case was on full display when it was unable to answer key questions at the hearing, despite the fact that the Company had referenced the Insurance Case in its own pre-filed testimony and the fact that the AGO had asked several questions about insurance coverage in data requests. (T7 p 370) Thus, at the time of the hearing, Duke was unable to answer basic questions about the Insurance Case:

- the amount of money the Company is seeking from its insurers (T6 p 243);
- a ballpark estimate of whether the coverage at issue was tens of millions or hundreds of millions (T7 p 373);
- the range of potential indemnity recoveries (T7 p 480);
- the procedural posture of the lawsuit, (T7 p 369);
- when the Company began negotiations with the insurance companies for the CCR claims (T7 p 380);
- how the coal ash costs the Company is seeking to recover from ratepayers compare to the coal ash costs for which the Company is seeking insurance coverage (T7 pp 375-76);
- whether the parties were conducting any discovery (T7 pp 414-15); and

- the reason the Company waited until 2017 to sue for coverage for liabilities under the 2014 Coal Ash Management Act (T7 p 404).

In light of the subsequent revelation from Duke in its late-filed exhibit that the net proceeds of the suit could be $300 million, Duke's lack of focus on this issue in this proceeding is puzzling.

In the Insurance Case, the defendant insurers assert that Duke (defined as Duke, LLC and Duke Energy Carolinas, LLC) elected to manage its CCRs in ash ponds, which contain toxic substances known by Duke at all relevant times to contaminate groundwater. (AGO Fountain Cross Exhibit 1 - Supplemental Case Management Report in Insurance Case p 2/Off. Exh.8 p 295) The insurers contend that Duke's ash ponds were built without any provision to prevent the contaminants from escaping into groundwater and that in fact some of the ash ponds were designed so that ash was placed in direct contact with groundwater. (AGO Fountain Cross Exhibit 1 - Supplemental Case Management Report in Insurance Case, pp 2-3/Off. Exh.8 pp 295-296) Further, the insurers assert that Duke continued to dispose CCRs in unlined ash ponds long after it knew that it had environmental problems. (AGO Fountain Cross Exhibit 1 - Supplemental Case Management Report in Insurance Case, p 3/Off. Exh.8 p 296) These contentions are supported by substantial evidence adduced in this rate case. The Company's failures form the basis of the insurers' failure to mitigate defense; they conclude that if Duke had taken appropriate measures, it could have avoided the closure costs alleged in its complaint. (*Id.*)

A separate—but related—defense is that Duke failed to file the Insurance Case in a timely fashion, despite long-standing knowledge of coal ash-related claims. On August 8, 1996, Duke sent a claim to its first layer insurer, AEGIS, identifying claims and circumstances that could lead to property damage claims. (AGO Fountain Cross Exhibit 2 - response to AGO data request 1-35/Off. Exh.8 p 300) The letter identified six coal fired plants. On August 19, 1996, Duke entered into a stand-still Agreement with AEGIS relating to certain environmental claims, including claims pertaining to ash ponds at the Cape Fear, Lee, Robinson, Sutton, and Weatherspoon coal plants, as well as claims related to the Roxboro Ash Management Areas. (AGO Fountain Cross Exhibit 5/Off. Exh.8 p 344: *see* T7 p 392) On December 13, 1996, Duke also entered into a standstill agreement with certain London underwriters and insurers (AGO Fountain Cross Exhibit 4/Off. Exh.8 p 336), which also pertained to CCR liabilities. (AGO Fountain Cross Exhibit 2, response to AGO data request 1-33/Off. Exh.8 pp 302). The London standstill agreement was subsequently extended until April 30, 1997. (AGO Fountain Cross Exhibit 4/Off. Exh.8 p 302) The 1996 AEGIS standstill agreement was extended until November 30, 2001. (AGO Fountain Cross Exhibit 5/Off. Exh.8 p 344)

Much later, on June 15, 2011, Duke entered into a standstill agreement with AEGIS to allow the parties a period of 180 days in which to attempt to resolve "ASH POND CLAIMS" pertaining to all eight of Duke's coal fired plants. (*Id.*) Witness Fountain did not know the nature of the claims addressed in the 2011 standstill agreement. (T7 p 398)

In 2016, Duke Energy Corporation, along with Duke Energy Carolinas, LLC, Duke, and other Duke Energy subsidiaries, entered into a standstill agreement with AEGIS to allow the parties to preserve their legal rights during a negotiation period. (AGO Fountain Cross Exhibit 5) In the 2016 AEGIS standstill agreement, AEGIS specifically noted that it maintained that the statute of limitations had expired with respect to any suit related to the North Carolina and South Carolina sites. (AGO Fountain Cross Exhibit 5 para 7/Off.

Exh.8 p 366). When the negotiation period ended, AEGIS filed a complaint for declaratory relief against Duke, alleging that it had denied all claims during the negotiation periods contracted for in the 1996 and 2011 standstill agreements, and that accordingly, the statutes of limitations had run on all of Duke's CCR-related claims. (AGO Fountain Cross Exhibit 6/Off. Exh.8 p 371; *see* T7 p 409)

Duke acknowledged that the insurers will be motivated to develop their defenses during discovery in the Insurance Case. (T7 p 493) He also acknowledged that Duke is involved in other litigation related to coal ash. (T7 p 494) Manifestly, Duke does not want a developed factual record on its poor coal ash management in the current ratemaking proceeding. In short, it is in the interest of Duke and its shareholders—but not its ratepayers—to prevent these facts from being developed. As far as it appears from the record in this proceeding, it is unclear that Duke is diligently prosecuting the Insurance Case.

Court filings in the Insurance Case make it clear that sorting out the facts will take many months, production of many documents, and depositions of many witnesses. The discovery period is much longer and more extensive than the period allotted for data requests and discovery in a ratemaking proceeding; the Case Management Order provides for a fact discovery period through August 31, 2018, one hundred and twenty fact depositions, at least twenty expert witnesses, and an expert discovery period through February 15, 2019. (AGO Fountain Cross Exhibit 7 pp 4-5/Off. Exh.8 p 394)

In its exhibit filed on December 5, 2017, Duke states that the Insurance Case, in which the complaint was filed on March 29, 2017, is in "an early stage." (Duke Late-Filed Exhibit No. 1 p 1) It states that many insurers have not produced documents, and is conspicuously silent on the issue of whether Duke has produced any. (*Id*.) No depositions have yet been taken, and trial is scheduled for February of 2020. (*Id*.)

Had Duke initiated the Insurance Case in a more timely fashion, it is possible that the Commission still may not have had the benefit of knowing with certainty and finality what, if any, insurance proceeds would be available to cover the costs of Duke's CCR-related liabilities. However, there is substantial evidence that if the Insurance Case had been filed even a year sooner, the highly relevant issue of whether Duke knew that its CCRs were contaminating ground and surface waters, and nevertheless failed to take appropriate remedial action to prevent environmental damage would have been fully explored through the discovery process in the Insurance Case, and the Commission would have had the benefit of those facts. Witness Fountain acknowledged that the evidence the parties have the incentive to develop in the Insurance Case could well have a bearing on whether Duke's coal ash costs were reasonably incurred. (T7 pp 421-22)

Duke acknowledged that because the Duke entities are the only plaintiffs in the Insurance Case, it is in full control of the litigation – what arguments to advance, what settlement offers to make and entertain. (T7 pp 465-66)

Accordingly, if the Commission determines that it is appropriate to allow Duke to recover some of its coal ash expenses, $300 million should be earmarked for being recovered in damages from the Insurance Case. Proceeding in this fashion better aligns the interests of Duke with its ratepayers. Further, because the insurance policies at issue were purchased between 1971 and 1986, this mechanism mitigates against the inherent generational unfairness of requiring current and future ratepayers to pay for cleanup of coal ash that was accumulated for seventy years. Once the Insurance Case is finally resolved, the Commission should allow a truing up to account for a greater or lesser recovery; however, in the event of a lesser recovery, Duke should be required to demonstrate through a preponderance of the evidence that the lower recovery was not as a result of its own imprudent actions, either in its mismanagement of coal ash or in allowing the statute of limitations to run on its insurance claims. Given Duke's dilatory conduct in delaying initiating the Insurance Case, in its discretion, the Commission should not allow a rate of return on the portion of the coal ash costs to be recovered via the Insurance Case.

2. Duke's Request for Cost Recovery is Problematic From an Accounting Standpoint, and Duke Is Not Entitled to Special Cost Recovery Treatment for Coal Ash Costs.

While Duke's imprudent treatment of coal ash is the key consideration pertaining to cost recovery, there are other more granular problems related to the coal ash costs Duke seeks to recover including accounting treatment of those costs and cost recovery mechanisms it asks the Commission to approve relating to those costs. Duke is asking for an increase of almost $200 million per year in rates for coal ash basin closure costs. Application at 4. The costs Duke is seeking fall into two categories: First, Duke seeks recovery of $241 million in costs incurred in prior periods for closing ash ponds. in costs incurred prior to the test year for closing ash ponds. Duke has created an Asset Retirement Obligation (ARO) for most of its costs associated with closing coal ash basins and proposes to use special accounting to recover the costs from ratepayers – including all carrying costs that accrue pending recovery at Duke's authorized rate of return. (Application at 7, 16; T6 pp 308-309). Second, Duke seeks $129.1 million per year, which is its estimate of the yearly cost of cleaning up its coal ash waste. (Maness Late-Filed Exhibit) In addition, Duke is asking for annual recovery through the fuel adjustment clause of certain costs associated with a contract to remove coal ash from its Sutton plant and ship it to a clay mine across the state. In the current rate case, it is seeking $13.8 million, and which shifts coal ash costs to the annual fuel adjustment proceedings that would otherwise be included in this case. All three of these cost recovery mechanisms fall outside normal ratemaking principles and should be rejected.

Duke characterizes the coal ash costs as operating expenses. However, these costs are not ordinary operating expenses like labor or fuel that pertain to utility services provided during the test period; rather the costs Duke proposes to recover pertain to the end of life costs for coal ash waste at facilities that have been used to provide utility service for decades, many of which are now closed. (Kerin Exhibit 11)

a. Duke's cost recovery proposals unreasonably and unfairly burden today's customers with costs of power produced decades ago.

Duke admits that these costs are "unique and are accounted for in a unique manner." (T1 p 144) Prior to this case, Duke was recovering these costs in depreciation expense over the life of the operating plant or through amortization for retired plants. (S*ee* T12 pp 92-95, Maness Exhibit 1 Schedule 1-1 - Amortization Schedule for Deferred Environmental Costs/Off. Exh. 19 p 37, Bateman Supplemental Exhibit 1, p 55-Amortize Deferred Environmental Costs/Off Exh 6 p 163). "These cost of removal rates were based on estimated closure costs included in the 2012 dismantlement studies prepared for the Company by Burns & McDonnell, a third party engineering firm." (T6 p 118-19) The cost increment was estimated assuming that existing ash ponds would be pumped dry and capped in place. (T22 p 49; AGO-Kerin Rebuttal Cross Exhibit 1 pp 3-4/Off. Exh.20 p 180)

Now, just a few years later, when the Company projects large increases in the cost of removal of its ash ponds, Duke seeks to change the method of accounting for the costs, and use a special recovery mechanism for the dollars deferred since 2015 *plus* a sizeable increment for upcoming expenses. In other words, Duke seeks to burden current ratepayers both with the large costs that were incurred during the deferral period, and similarly the expected "ongoing" costs will be burdensome. The cost recovery periods requested by the Company are much shorter than the decades over which the coal ash itself accumulated. (T16 p 203) Duke's proposal to impose coal ash costs on current customers raises issues of intergenerational ratepayer fairness given Duke's failure to undertake actions earlier to address ash pond closure.

In a somewhat analogous situation, when it considered whether to allow the recovery of manufactured gas plant clean-up costs, the Commission concluded that – even to the extent costs were found prudent – the full costs should not be borne by ratepayers. Such costs were allowed, but were amortized over a period of years, the magnitude of the costs was considered in determining how long the amortization period should be, and no carrying costs were allowed during amortization in order that the utility's shareholders would share the cost responsibility.[13] Thus, the Commission exercised discretion about whether and to what extent to authorize the recovery of new environmental compliance costs relating to past utility service in operating expenses, even as to such costs that were not disallowed as imprudent. And the burden on current ratepayers was a factor that was considered in determining the reasonableness of cost recovery.[14]

b. Duke should not be allowed to recover the deferred costs.

[13] 1994 Public Service Order at 22-23.
[14] *Id.*

Duke's request to recover the deferred costs involves single-issue ratemaking, *i.e*., Duke seeks to recover coal ash costs going back to the beginning of 2015 – plus carrying costs – without review of the other rate elements that were in effect that might offset the need for the cost recovery. Such deferred accounting inherently involves unfairness to ratepayers, because future ratepayers are paying for costs associated with power consumed by the ratepayers of yesterday. That is particularly so for these costs related to the closure of basins used to store waste from power production over a period of decades. The North Carolina Supreme Court has long recognized the inequities of this: "Such rate making throws the burden of such past expense upon different customers who use the service for different purposes than did the customers for whose service the expense was incurred."[15]

Moreover, Duke's request for an addition in future rates to recover the under-recovered coal ash costs from the past two and a half years seeks impermissible prospective ratemaking (also called retroactive ratemaking in some cases).[16] Utility rates are established under statutory authority to recover the utility's cost of service and reflect a fair return, and the rates are presumed to be sufficient for the utility to recover all costs of serving its customers.[17] Accordingly, a "failure of the utility, in a previous period, to earn the anticipated return over and above its then-expenses does not authorize it to charge its

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[15] *State ex rel. Utilities Commission v. Edmisten*, 291 N.C. 451, 470, 232 S.E.2d 184, 195 (1977).

[16] *Edmisten,* 291 N.C. at 468-69, 232 S.E.2d at 194-95 (citing N.C. Gen. Stat. § 62-133); *see also* Final Order Assessing Rate of Return Penalty and Granting Partial Rate Increase *In the Matter of Application by Carolina Water Service, Inc. for Authority to Increase Rates for Water and Sewer Utility Service in All of its Service Areas in North Carolina,*Docket No. W-354, Sub 111 (October 12, 1992) 82 N.C.U.C. 387, 498, *aff'd in part and remanded on other grounds sub nom, State ex rel. Utilities Commission v. Carolina Water Service, Inc*., 335 N.C. 493, 439 S.E.2d 127 (1994).

[17] *Id.*

present customers a rate higher than reasonable for present service in order to compensate for the past deficit."[18] Our Supreme Court has concluded that a utility does not have a vested right to collect its unanticipated expenses, and "cast upon subsequent users the expense of serving prior users is discrimination forbidden by Gen. Stat. § 62-140."[19]

Accordingly, Duke's unilateral decision to book coal ash costs to a deferred account for consideration in a later rate case was consequential. In this case, the costs carried in the deferred account should not be recovered.

The Commission has discretionary authority to defer costs for later recovery, but that discretion is exercised upon request, and ought to be prospective from the time of the request or at least close in time to the deferral request, not retroactive back two or three years, as Duke seeks to do in this case. Commission Rule R7-27(a)(2)c requires electric utilities to apply to the Commission in order to use deferral accounting rather than account for an item in current expenses. (AGO Bateman Cross Exh. 1/Off Ex 20 p 104) Likewise, FERC Account 182.3, referenced in Rule R7-27(a)(2)c, provides for deferral accounting by the creation of a regulatory asset based on the ratemaking action of a regulatory agency, not based on unilateral action taken by the utility. (*Id.*)

Duke knows how to request an accounting order, and has indicated in previous filings that it is aware that it should seek advance approval to the extent possible.[20]

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[18] *Edmisten*, 291 N.C. at 468, 232 S.E.2d at 195.

[19] *Edmisten*, 291 N.C. at 470-71; 232 S.E.2d at 196; *See also State ex rel. Utilities Commission v. Thornburg*, 84 N.C. App. 482, 484, 353 S.E.2d 413, 414 (1987) (holding that prospective ratemaking to recover an unexpected past expense is "as improper as is retroactive ratemaking" and the Commission exceeded its authority when it allowed the utility to reflect a true-up for actual fuel costs experienced although the statute then in effect did not authorize a true-up.)

[20] *See e.g.*, Order Granting Petition with Modification issued on an expedited basis on 19 October 2006 to allow the Company to implement deferral accounting in the fourth quarter

Duke failed to request authorization to defer the coal ash costs before they were incurred – delaying the filing of its petition until December 30, 2016, while seeking deferral of costs incurred back two years to January 1, 2015, so that they would be recoverable in a rate case expected to be filed in 2017.[21]

The deferral in this case relates to Duke's establishment of an Asset Retirement Obligation for costs that are already accounted for in rates through amortization and depreciation, and raises concerns that were discussed in the Commission's Order Granting Motion for Reconsideration and Allowing Deferral of Costs issued August 12, 2003 in Docket No. E-2 Sub 826 *In the Matter of Carolina Power & Light Company's Petition for Authority to Place Certain Asset Retirement Obligation Costs in a Deferred Account ("2003 ARO Order")*(AGO Bateman Cross Exhibit 2/Off Exh. 20 p 106) Duke referred to the *2003 ARO Order* as authority for deferring ARO costs in its Petition for deferred accounting of the coal ash costs. *Petition to Defer Coal Ash Costs* at 5 note 2. In the *2003 ARO Order*, the Commission authorized Duke predecessor CP&L to place certain asset retirement obligation costs in a deferred account, but gave the following cautionary instruction relating to the creation of and accounting for new asset retirement obligations:

> the Commission is of the opinion, and so concludes, that the Company should be, and hereby is, explicitly placed on notice that any proposed changes in the cost of removal for long-lived assets and/or in the accounting for such costs must be submitted to the Commission for its approval in the context of a general rate case or other appropriate proceeding prior to implementation.

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of that year *In the Matter of Petition of Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc., for an Accounting Order to Defer Certain Environmental Compliance Costs* at 2.

[21] *See* Duke Energy Progress, LLC and Duke Energy Carolinas, LLC Petition for An Accounting Order *In the Matter of Joint Petition of Duke Energy Progress, LLC and Duke Energy Carolinas, LLC for an Accounting Order to Defer Environmental Compliance Costs,* filed 30 December 2016 in Docket Nos. E-2, Sub 1103 and E-7, Sub 1110 ("*Petition to Defer Coal Ash Costs"*)

(*Id* at 11-12) Thus, the Commission has directed that *prior approval* should be obtained in a general rate case for deferred accounting authorization under the circumstances presented in this case. Duke's unilateral decision to change how it accounts for coal ash costs violated Commission rules and specific directions expressed in prior orders concerning Asset Retirement Obligations.

Furthermore, the Commission's determination whether to allow cost deferral is a matter that is within the sound discretion of the Commission, and is not a mere formality.[22] The Commission focuses on the financial impact of the deferral, but is cautious in granting deferral:

> As noted in the past, in fulfilling its responsibilities, the Commission has, historically, employed the use of deferral accounting sparingly, requiring instead that costs be charged AGOainst revenue realized during the accounting period in which the attendant costs were actually incurred. Importantly, deferral has been allowed only those instances where there has been a clear and convincing showing that the costs in question, among other things, would have a materially detrimental impact on the company's financial condition, absent deferral.[23]

The justification for deferral in this case due to the financial impact of the coal ash costs should be weighed against the timing of Duke's request and the considerable evidence that the magnitude of the costs is due in large part to Duke's imprudent management of coal ash over a period of many years.

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[22] Recently-enacted N.C. Gen. Stat. § 62-133.13, allows—but by no means requires—deferral of coal ash costs.

[23] Order Approving In Part and Denying In Part Request for Deferral Accounting in Docket No. E-7, Sub 1029 issued 3 April 2013 *In the Matter of Petition of Duke Energy Carolinas, LLC for an Accounting Order to Defer Certain Capital and Operating Costs Incurred for the Advanced Clean Coal Cliffside Unit 6 Steam Generating Plant, the Dan River Natural Gas Combined Cycle Generating Plant, and the Capacity-Related Codifications at the McGuire Nuclear Generating Plant* at 14-15

c. Duke's Proposal to Earn A Rate of Return on Deferred Costs Is Meritless.

Duke also seeks to recover "carrying costs" during amortization of the deferred coal ash costs by placing the unamortized balance in ratebase for recovery of Duke's full rate of return. (T6 p 310) However, the deferred costs in this case are included as special operating expenses. Operating expenses are recoverable without return pursuant to N.C. Gen. Stat. § 62-133(b)(3).[24] The unamortized balance of the deferred costs are similar to those considered in *Carolina Water,* where the Supreme Court considered whether the Commission erred when it treated utility plant that was not in service at the end of the test year – and would not be returned to service – as "an extraordinary property retirement," allowed amortization of the unrecoverable costs over ten years, and included the unamortized portion in ratebase.[25] The Court concluded that the costs were for plant that was not used or useful and thus the unamortized costs should not have been included in ratebase.[26] As the Supreme Court explained: "Including [these] costs in ratebase allows the company to earn a return on its investment at the expense of the ratepayers."[27]

When a similar issue was considered by the Commission in the recent Dominion general rate case relating to ratebase treatment of the unamortized balance during coal ash cost recovery, the Commission distinguished the circumstances in *Carolina Water.* However, the Commission's decision in that case should not set the standard adopted in this case.[28] The determination was allowed under the circumstances presented in that case

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[24] *Thornburg I*, 325 N.C. at 475, 385 S.E.2d at 458.
[25] *State ex Rel Utilities Com v. Carolina Water,* 335 N.C. 493, 507, 439 S.E.2d 127, 135 (1994).
[26] *Id.*
[27] *Id.* at 508, 439 S.E.2d at 135 (citations omitted).
[28] 2016 Dominion Rate Order at 63.

without precedential effect regarding the treatment of coal ash costs in future proceedings.[29]

d. Costs From Duke's Contract with Charah Are Not Recoverable In the Annual Fuel Adjustment Clause.

Duke claims that some of the spent coal ash costs are net losses on the sale of byproducts and the costs may be recovered in Duke's 2018 fuel adjustment clause. (T10 p 104) However, the transaction between Duke and Charah, LLC ("Charah") bears no resemblance to a sale of byproduct for reuse; instead it is an arrangement for Charah to dispose of the coal ash in a lined facility. The costs are not appropriate for consideration in the fuel adjustment clause under N.C. Gen. Stat. § 62-133.2, and Duke's proposal should be rejected.

Duke has contracted with Charah to excavate coal ash from impoundments at the Sutton Plant and transport it to a former clay mine in Chatham County known as Brickhaven. (T18 p 230) In the current rate case, it seeks costs of $13.8 million; and if the Commission approves this cost recovery treatment, in its 2018 fuel filing, it will seek an estimated $6.9 million in costs related to payments made in January – March 2017. (T10 pp 106-07). However, the Company has not demonstrated the facts necessary to show that it is appropriate to address these costs through the fuel adjustment clause. The Company bears the burden of proof as to the correctness and reasonableness of the fuel adjustment charge. N.C. Gen. Stat. § 133.2(d). Because it not met its burden, as set forth in detail below, if and to the extent that the costs are reasonable and prudent, they should be recovered in base rates, using the same treatment the Commission ultimately approves for other coal ash costs incurred during the test period.

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[29] *Id.*

North Carolina law provides that increases and decreases in fuel and fuel-related costs are permitted to be recovered via an annual rider that reflects changes in the costs "established in the electric public utility's previous general rate case on the basis of cost per kilowatt hour." N.C. Gen. Stat. § 62-132.2(a). The statute provides that the "[c]ost of fuel and fuel-related costs shall be adjusted for any net gains or losses resulting from any sales by the electric public utility of by-products produced in the generation process to the extent the costs of the inputs leading to that by-product are costs of fuel or fuel-related costs." N.C. Gen. Stat. § 62-133.2(a1)(9).

As noted, the Company has the burden to prove that the transaction with Charah is a sale. It has failed to meet its burden. A wholly-owned subsidiary of Charah, Green Meadow, LLC, purchased Brickhaven on November 13, 2014. (T18 p 231). On June 5, 2014, Green Meadow obtained a permit from DEQ to operate Brickhaven as a "solid waste management facility, structural fill, mine reclamation." (T18 p 230). Charah is not a real estate developer, nor is it a mine reclaimer. It is in the business of CCR management. (T18 p 230). Thus, the Charah contract is wholly different from the use of structural fill in the Asheville Airport, where a present and ongoing project required use of structural fill.

The scope of work for the contract between Duke and Charah includes building haul roads, engineering a rail loading system, dewatering the impoundment, excavating the ash, transporting the ash, and placing it in the Brickhaven landfill. (T18 p. 234) The contract had a fixed pricing component that covers the preparatory work and a perton pricing component that covers such items as excavation, transportation, loading and unloading. (T18 p 234) The general terms of the contract with Charah are the same terms used for other ash disposal contracts. (T17 pp 42-43; PS Kerin Cross Examination Ex. 1 -

Duke Energy Executive Summary Excavation Work at Dan River, Sutton, and WS Lee pp 6-8/Off. Exh.17 pp 49-50) There was no discount to the pricing for a sale of coal ash to Charah. (T10 p 141; T18 p 234). When the Public Staff asked the Company for documents showing how the parties valued the coal ash, the Company responded that it had none. (T10 p 141; T18 p 236) The Company asserts that the costs of disposal would have been higher but for the sale of the ash (T10 p 111) but does not point to any evidence of this assertion. The failure of the Company to adduce such evidence wholly undercuts its reliance on the Commission's 2016 report to the legislature regarding beneficial reuse of CCRs, which concluded that, while selling CCRs for re-use had resulted in immediate net costs to utilities and had increased rates to customers, it appeared to the Commission that the costs to ratepayers would be even higher absent such sales. (McGee Rebuttal Exhibit 1 - Report of the NCUC to the Joint Legislative Commissions Regarding The Incremental Cost Incentives Related to Coal Combustion Residuals Surface Impoundments For Investor-Owned Public Utilities in North Carolina p 4/Vol. 10 p 33)

The record is devoid of any evidence that Charah placed a value on the Company's CCR. The Company did not call Charah as a witness. The Company admitted that there was no documentary evidence of any kind establishing a value for the CCRs. The Company admitted that it had no knowledge of whether Charah or Green Meadow has any plans to use Brickhaven for anything more than a landfill for the Company's coal ash waste. Charah's subsidiary purchased Brickhaven only after it had been awarded the contract to dispose of the Company's coal ash waste. (T18 p 232)

The contract between the Company and Charah lists Charah as the "Seller" or "Contractor," not as the buyer. (T18 p. 233).

The Company's position is that the difference between disposal of a by-product and sale of a by-product is that "the by-product's intrinsic value is recognized by the reuse of the by-product." (T10 p. 105). Further, the Company agrees that the cost of disposing coal ash in a landfill would not be a sale and would not be recoverable under the fuel adjustment clause. (T10 p 133). By that standard, the Charah transaction fails as a sales contract. As far as it appears from the record, Charah is merely disposing of the coal ash. The coal ash was trucked from Wilmington to Chatham County, dumped in an abandoned clay mine that had been fitted with a multimillion dollar liner and leachate system, and only after the Company paid six million dollars to the County. (T10 pp 146-47)

H. <u>CONCLUSION.</u>

As discussed above, the burden is on Duke to show that it is entitled to recover the massive coal ash-related costs it seeks to recover. Based on the record, Duke did not meet its burden and is not entitled to any increase in rates recover these costs.

However, the AGO recognizes that the Commission may want to consider alternate approaches that would apportion some coal-ash related costs among Duke's shareholders and ratepayers, *i.e.*, hold ratepayers responsible for some, but not all, of the coal ash costs that Duke seeks to recover. If the Commission ends up taking this approach – which, to be clear, the AGO does not support or recommend in light of the extensive record Duke's imprudent treatment of coal ash – the Commission should, at a bare minimum, structure the approach in a way so as to minimize the burden and impact on consumers as much as reasonably possible.

Some of the tools the Commission could consider using to do this would include, among other things:

- Disallowing costs as suggested by Public Staff for the reasons given in its brief.
- Disallowing all of the coal ash costs booked in the deferred account. Normal ratemaking principles require considering all costs (and savings) associated with a test year together, and Duke should not be allowed to cherry-pick a single category of costs and recover them outside the ratemaking process.
- Not including any of the costs of the Charah contract in the annual fuel adjustment proceedings. These are ordinary coal ash disposal costs and should be treated as such.
- Allocating recovery of $300 million of coal ash costs to the recovery in the Insurance Case. Requiring Duke to look to insurance proceeds for coal ash recovery will give the company appropriate incentives to pursue the litigation.

An additional tool the Commission could consider along these lines would be spreading out the cost recovery over a long period of time over a large number of ratepayers so as not to inordinately impact current ratepayers. Under the Public Staff proposal, Duke would be allowed to defer the costs incurred from January 1, 2015 through August 31, 2017, except for particular costs that are disallowed as imprudent. The Public Staff's proposal further provides that the balance of deferred costs after disallowances, together with the related carrying costs should be amortized over 26 years – a length of time that is gauged to spread costs out for customers, and share the cost with Duke's shareholders (since the carrying costs are not recoverable). *See* Maness Late Filed Exhibit. The AGO agrees with the Public Staff that, to the extent allowed deferred costs should be amortized for recovery without carrying costs. Further, the AGO agrees that it is improper for Duke to recover future costs as normal operating expenses, and also agrees that all costs that are deferred should be reviewed for prudence in future rate proceedings prior to recovery.

However, the AGO does not support the position that would allow Duke to recover carrying costs during the deferral period. Ultimately the proposal is to recover costs by amortizing them as operating expenses, and it is not appropriate for Duke to earn a rate of return during the deferral period. Duke has the ability to decide when it is appropriate to file another rate case, and it is not reasonable for Duke to accrue carrying costs in the interim. In addition, Duke does not propose to begin amortization of the coal ash costs until new rates take effect. To the extent that Duke is allowed to defer coal ash costs for recovery from ratepayers, it should be required to begin amortization immediately to minimize the amount deferred. This cost-sharing approach is within the Commission's discretion and is consistent with the approach taken when abandoned plant costs were allowed as operating expenses, but without a rate of return,[30] and when natural gas utilities were authorized to recover costs for remediation of manufactured gas plant sites.[31]

Again, the AGO believes Duke has not satisfied its burden of showing that it is entitled to recovery of coal ash costs from ratepayers, but the Commission may consider among other things - the above methods to reduce the impact on ratepayers if it decides to take that approach.

II. THE PROPOSED 26% INCREASE TO THE BASIC CUSTOMER CHARGE FOR RESIDENTIAL CUSTOMERS UNDERMINES ENERGY EFFICIENCY GOALS AND IS UNFAIR TO LOWER INTENSITY USERS.

[30] *Thornburg I*, 325 N.C. at 475-77, 385 S.E.2d at 457-59.
[31] 1994 Public Service Order at 20-22.

Duke' proposal to increase the basic monthly charge for residential customers 26% from $11.16/month to $14/month[32] should be denied because it will discourage consumers from making investments in energy efficient products and home improvements or from taking other careful measures to budget their consumption, contrary to statutory public policy goals favoring energy efficiency and energy conservation. (T 13 pp 245-46, T17 pp 206-09) Moreover, the increase will shift costs to small users such as low income and elderly consumers who live in small apartments, as they are charged the same unavoidable basic monthly charge as other residential consumers who live in spacious high-consumption residences. Such small users will have much larger rate increases under Duke' proposal than high-end users. (T13 pp 238-245)

Energy efficiency and energy conservation are encouraged by a rate design that sets the unavoidable basic monthly charge as low as possible and recovers most of the cost of service in the usage charge. Likewise, a rate design that uses a low basic monthly charge allows customers to curb usage for budget reasons. Conversely, higher base monthly charges reduce the attractiveness of investing in energy efficient appliances and energy-saving improvements to customers' homes because the pay-back on the investment takes longer, and reduces consumers' ability to budget their consumption. (T13 pp 245-46, T17 pp 208-09)

Another downside to raising the fixed monthly charge is the associated shift in risk from Duke to ratepayers relating to variations in consumption. The Company's incentive to be efficient and economical in its predictions about growth in consumption are

[32] Initially Duke proposed to increase the basic monthly charge to $19.50/month but now proposes the $14/month rate as part of the partial settlement reached with the Public Staff.

diminished as the fixed monthly charge increases since more of the cost is recoverable even if consumption grows more slowly than Duke forecasts.

The effect of the proposal runs contrary to several statutorily declared North Carolina public policies relating to public utilities regulation that favor the encouragement of energy efficiency, energy conservation, and well-planned utility resource development, including policies:

> (3a) <u>To assure that resources necessary to meet future growth</u> through the provision of adequate, reliable utility service <u>include use of</u> the entire spectrum of demand-side options, including but not limited to <u>conservation</u>, load management <u>and efficiency programs</u>, as additional sources of energy supply and/or energy demand reductions. To that end, to require energy planning <u>and</u> <u>fixing of rates</u> in a manner <u>to result in the least cost mix of generation and demand-reduction measures</u> which is achievable, <u>including</u> consideration of appropriate <u>rewards to utilities for efficiency and conservation which decrease utility bills</u>;
>
> (4) To provide <u>just and reasonable rates</u> and charges for public utility services without unjust discrimination, undue preferences or advantages, or unfair or destructive competitive practices and <u>consistent with long-term management and conservation of energy resources by avoiding wasteful, uneconomic and inefficient uses of energy</u>;
>
> ***
>
> <u>[6) To foster the continued service of public utilities on a well-planned and coordinated basis that is consistent with the level of energy needed for the protection of public health and safety and for the promotion of the general welfare as expressed in the State energy policy;</u>
>
> ***
>
> (10) <u>To promote the development of</u> renewable energy and <u>energy efficiency</u> <u>through the</u> implementation of a Renewable Energy and <u>Energy Efficiency Portfolio Standard</u> (REPS) <u>that will</u> do all of the following:
> a. Diversify the resources used to reliably meet the energy needs of consumers in the State.
> b. Provide greater energy security through the use of indigenous energy resources available within the State.
> c. <u>Encourage private investment in renewable energy and energy efficiency</u>.

> d. Provide improved air quality and other benefits to energy consumers and citizens of the State.

N.C. Gen. Stat. § 62-2(a) (emphasis added). The Commission is vested with authority "to regulate public utilities … rates … and their expansion in relation to <u>long-term energy conservation and management</u> policies and statewide development requirements" consistent with these and other policies set forth in Chapter 62. N.C. Gen. Stat. § 62-2(b).

Undeniably, the increase to the basic monthly charge reduces the incentive for customers to budget their consumption, and discourages private investment in energy efficiency by lengthening the time before customers recoup their investments. (T13 pp 245-46, T17 pp 208-09) Jonathon Wallach, an expert who has consulted on electric utility industry matters for over 30 years, estimated that consumption would increase by 2% over the next several years if Duke' initial proposal to charge $19.50.month is allowed. (T17 pp 209-10, 216) The smaller increase proposed in the partial settlement is not as discouraging, but still reduces the incentive to conserve and lengthens the time for recoupment of investments by consumers in more energy-efficient home improvements and appliances – particularly given that the 26% increase in the charge is proposed so soon after a 65% increase to the basic monthly charge took effect in 2013. (T17 pp 209-210)

Moreover, the increase clearly works against the purposes of programs that utilities offer to promote energy efficiency and conservation. It is unfair to impose special charges on consumers to pay for energy efficiency measures promoted by Duke – including sizeable utility incentives paid to Duke for offering the measures – and then adopt a rate design that discourages consumers from using their own measures to improve energy efficiency and energy conservation.[33]

There is no need to increase the basic monthly charge; indeed Mr. Wallach evaluated the cost studies used by Duke and recommended decreasing the charge to $ 8.54. (T17 p 215) He disagreed with the contention that basic customer charges should be designed to recover all of the costs proposed by Duke. Instead, he posited that the fixed customer charge should recover the direct customer costs – those incurred to connect a customer to the utility distribution system, i.e., the plant and maintenance costs for the service drop and meter, meter reading, billing, and other such customer-service expenses. (T17 p 213-15) The Company's proposal also includes some costs of the distribution system that serve multiple customers and overstates the cost impact per customer. (T17 p 214) A reduction in the basic monthly charge would still provide the opportunity for Duke to recover all costs since the balance of its cost of service would be addressed through the usage charge. (*Id*.)

Another important concern raised by the proposed increase to the basic monthly charge is the burdensome effect it would have on low use customers, including low income and elderly consumers. Given the size of the increase to the basic charge, the brunt of the rate increase will be felt by smaller users, and average and low-income households and elderly consumers use significantly less energy/month on average. (T13 pp 242-245, 278-279)

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[33] *See* Order Approving DSM/EE Rider and Requiring Filing of Customer Notice issued January 27, 2017 in Docket No. E-2, Sub 1145 at 6 (allowing $157 million as the forward-looking DSM/EE revenue requirement for the Company, which includes over $40 million of net lost revenues and $20 million in program portfolio performance incentives, most of which are allocated to residential customers).

Questions posed by Commissioners during the evidentiary hearing raised several additional considerations. First, the cost studies that are used to allocate costs among different customer classes are not well suited to determine rate design issues. (T17 pp 221-222) Data used to allocate costs over many customers may distort results when applied on a per-customer basis. (*Id.*) Furthermore, the *design* of rates carries important ramifications for policies such as the incentives that encourage energy efficiency, conservation, load shifting, etc.

Second, concerns have been expressed that increasing the basic monthly charge is appropriate in the context of "net metering," i.e., where customers are allowed to net energy produced by rooftop solar installations against their usage. That concern is not addressed by raising the basic monthly charge for all residential customers though. Rather, as Mr. Wallach explained, net metering involves a number of factors that should be examined – including the costs associated with serving those consumers as their usage drops against the benefit of the investment dollars shouldered by the consumers and the peak shaving that often corresponds to solar installations. (T17 p 223) A better understanding of the costs and benefits is needed to assess the impact of the basic monthly charge on net metering, and it is not just or reasonable to make an adjustment to the charge for all customers based on the concern.

Third, although lower income and elderly customers tend to be smaller users, so that the large increase to the basic charge will fall more heavily on them, (T 13 pp 242-45) some residential consumers live in leaky residences such as mobile homes, and have difficulty affording their bills when weather is colder or warmer than normal. In general, however, less affluent and elderly customers live in smaller premises and a large increase in the fixed monthly charge is most burdensome to them. (*Id.*) A more effective way to assist consumers who live in leaky residences would be to increase funding for low-income weatherization programs. (T13 pp 253-55) Funding for such measures that target low-income consumers is disproportionately low under current programs offered by Duke. (T13 p 255) Yet funding low-income weatherization would have the dual advantages of aiding troubled consumers and promoting energy efficiency/conservation goals.

In sum, the proposed 26% increase to the basic customer charge for residential customers will discourage energy efficiency and energy conservation, contrary to public policy goals, and will shifts costs from high-end users to smaller users, including low-income and elderly who tend to consume less electricity per month and must carefully budget consumption to reduce their bills.

III. DUKE'S UNJUSTIFIABLY HIGH 9.9% RATE OF RETURN ON EQUITY AND 52% EQUITY CAPITAL STRUCTURE ADD OVER $100 MILLION ANNUALLY TO THE REVENUE REQUIREMENT.

Over $100 million is added to Duke's annual revenue requirement unnecessarily under the rate of return factors Duke proposes in the Partial Settlement.[34]

- Establishing a 50% equity/50% debt capital structure is sufficiently conservative, fairly balances the interests of investors and consumers, and

[34] The $107.7 million addition to revenue is calculated using Duke's proposal in the partial settlement for 9.9% ROE and 52% equity capital structure compared to an 8.48% ROE with 50% equity. (T13 p 127); RAP-3 Settlement p 2. (Off. Exh.13 p 44) Duke's initial proposal requested a 10.75% ROE and 53% equity, and the excess revenue required under that request would have added $172.4 million to the annual revenue requirement unnecessarily. RAP-6 pp 2-3 (Off. Exh.13 pp 41-42)

reduces the revenue requirement by over $10.5 million per year.[35] (RAP-3 Settlement pp 1-2 /Off Exh.13 pp 43-44)

- Establishing an 8.48% rate of return on equity (“ROE”) is supported by stock market data showing what investors require under current economic conditions, fairly balances the interests of investors and consumers, and reduces the revenue requirement by *another* $96.1 million per year. (T13 p 126)

Conversely, Duke has not met its burden of proof that the 52% equity/48% debt capital structure proposed in the partial settlement is required or that a 50/50 equity/debt structure uses too much debt leverage. The impact of using more equity is very costly in the current economy. Likewise, Duke has not shown that the 9.9% ROE proposed in the partial settlement fixes a reasonable return given the low cost of equity capital in current markets. There is no evidence that setting such a high rate of return is necessary to attract the investment dollars needed for adequate service or that it is otherwise advantageous or fair for North Carolina retail customers. To the contrary, the excessive return sends dollars out of North Carolina to Duke’s shareholders – wherever in the world they are – and those dollars would be better spent in our local communities.

It is time to reduce Duke’ rate of return to the level indicated by current market data, particularly if the Commission intends to allow Duke’ requested recovery of coal ash closure costs in rates. Duke’s request for recovery of coal ash costs from ratepayers asks the Commission to exercise discretion for the benefit of Duke’s investors, and to the extent

[35] The impact of establishing a 50-50 debt to equity capital structure is $15 million per year if no modification is made to the ROE proposed in the partial settlement (RAP-3 Settlement p 3/Off. Exh.13 p 45)

that that occurs, the Commission should also exercise its discretion on behalf of consumers and establish a substantial reduction in the rate of return.

A. North Carolina Law Requires that the Rate Of Return Be Fair Both for Investors and Customers, and that It Be Fixed As Low As Possible.

North Carolina law requires the Commission to fix a rate of return that is fair to the utility's investors *and its customers*. N.C. Gen. Stat. § 62-133(a), § 62-133(b)(4). "Chapter 62's ROE provisions cannot be read in isolation as only protecting public utilities and their shareholders. Instead, it is clear that the Commission must take customer interests into account when making an ROE determination."[36] The statutory intent is that the Commission should establish rates as low as possible, consistent with Constitutional requirements.[37]

Two cases that explain the constitutional standard for rate of return are *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923) and *Federal Power Commission v. Hope Natural Gas Co.,* 320 U.S. 591 (1944). They recognize that 1) ratemaking involves a balancing of investor and consumer interests, 2) the equity investor's interest is served if the return to the equity owner is comparable to the returns on investments in other enterprises having similar risks, and 3) the standard supports an ROE that is sufficient to ensure confidence in the financial integrity of the enterprise to maintain its credit and to attract capital. (T13 p 85, T14 pp 21-22)

The burden of proof in the case is upon the utility to show that its proposed rates are just and reasonable.[38]

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[36] *State ex rel. Utilities Comm'n v. Cooper*, 366 N.C. 484, 495, 739 S.E.2d 541, 548 (2013) ("*Cooper*").
[37] *Duke Power*, 285 N.C. at 388, 206 S.E.2d at 276.
[38] N.C. Gen. Stat. §§ 62-75, 62-134(a); *State ex rel. Utilities Comm'n v. Central Tel. Co.*, 60 N.C. App. 393, 394, 299 S.E.2d 264, 265 (1983).

The Commission must engage in an independent analysis of the evidence and reach its own conclusion when it fixes the rate of return.[39] It cannot simply rely on the rate of return proposed in a non-unanimous stipulation. (*Id*.)

B. <u>The Evidence Does Not Support the Need for a Capital Structure that Funds Ratebase Using more than 50% Common Equity, and the Excessive Reliance on Equity in Duke's Capital Structure Will Cost Ratepayers Millions of Dollar Per Year Unnecessarily.</u>

When fixing a utility's rate of return pursuant to N.C. Gen. Stat. § 62-133(b)(4), one of the things the Commission must determine is the appropriate capital structure, i.e., how much of the utility's investment capital should be funded by debt versus equity.[40] The debt/equity ratio established by the Commission is the target Duke uses to manage its capital structure over time, (T8 p 400) and the actual ratio varies over time as debt issuances occur, earnings are affected by seasonal variations, and dividend payments are made to the parent company. (T8 p 29) The reasonableness of the capital structure takes into account what is sufficient to ensure financial integrity, adequate to maintain credit and attract capital, and what structure is used by comparable investments.

1. A larger ratio of equity in the capital structure significantly increases Duke's annual revenue requirement.

Cost is an important factor to consider in determining a reasonable capital structure because equity capital is so much more expensive than debt, particularly when related costs such as income taxes are taken into account. It costs almost four times as much to fund ratebase using equity capital as using debt. (T8 pp 402-403) For example, every $100 of ratebase that is funded by equity capital adds approximately $15.81 to Duke's annual

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[39] *Cooper*, 366 N.C. at 494, 739 S.E.2d at 547.

[40] *See*, 21 December 2012 Order Granting General Rate Increase to Virginia Electric & Power Company (d/b/a Dominion North Carolina Power) in Docket No. E-22, Sub 479 ("Dominion 2012 Order") at 97.

revenue requirement, whereas only $4.06 is added when the ratebase is funded using debt, based on the costs of equity and debt proposed under the partial settlement proposal and including related taxes and other fees, as is shown in the table below:

	Return	Retention	w/ gross up
Debt	4.05%	0.9968	4.06%
Equity	9.90%	0.626201	15.81%

For cost of debt and equity, see settlement proposal.

For "retention" see Bateman Updated Bateman Exhibit 1 Partial Settlement p 2 line 7 showing the adjustment for income taxes [37.0599%] + regulatory fee [.14%] + uncollectible [.18%].

See AGO DeMay Cross Exhibit 1 p 2 (T8 p 275)

In other words, over $15 million could be shaved from Duke's revenue requirement if the Commission were to establish a 50/50 equity-to-debt ratio instead of using 52/48 equity/debt, assuming all other factors stay the same and using the partial settlement ROE of 9.9%. *See* Exhibit RAP-1 Settlement p 3. (Off. Exh.13 p 45)

B2. <u>Duke does not require more equity than debt in its capital structure in order to obtain and maintain investment capital on reasonable terms.</u>

Duke has not shown that a 50/50 equity-to-debt capital structure is overly-leveraged for a utility or that that target would harm Duke's financial integrity or its ability to access capital markets as needed. While Duke claims that a higher equity capital structure is "optimal," and boosts cash flow (T8 pp 29, 31) it is not fair to consumers to use an excessive ratio of equity just to boost revenues for Duke' shareholder.

Duke' high credit rating indicates that a 50/50 capital structure can be adopted without compromising Duke's financial integrity. Duke has a higher debt rating than other electric utilities. The rating has been Aa for Moody's since 2013, and A for Standard & Poors. (T14 pp 35-36)

The proposed 52% equity capital structure exceeds the actual test period capital structure, which was 51.2% equity (including the current maturities of debt and refinancing). (T8 p 48)

Moreover, a 50/50 capital structure is similar to the capital structures used for comparable investments. It exceeds the average equity ratio for the other electric utilities that were used in the proxy groups to show comparable investments:

	Period	Average	Median
Parcell Proxy Group	2012-2016	50.4%	49.9%
	2020-2022	48.6%	50.5%
Hevert Proxy Group	2012-2016	49.6%	49.4%
	2020-2022	49.4%	49.3%

(T 14 p 46)[41]

Furthermore, it exceeds the average equity ratios authorized in regulatory commission determinations over the past five years:

2012	50.69%
2013	49.25%
2014	50.28%
2015	49.54%
2016	48.91%
2017 (2Q)	48.26%

[41] These data were provided in testimony of Public Staff witness David Parcell. According to Carolina Utility Customers Association witness Kevin O'Donnell, the averAGOe equity ratio was even lower in the 2016 test year; he shows an averAGOe of 48.7% for the proxy group used by Duke witness Hevert, according to the Value Line Investment Surveys dated June 16, July 28, and August 18, 2017. (T 15 pp 193-94)

Regulatory Research Associates, "Regulatory Focus", July 26, 2017

(Off. Exh.14 p 47; Off. Exh.15 p 194) In addition, the proposed 50/50 ratio maintains considerably more equity in the ratio than is presently maintained by Duke' parent company Duke Energy. Duke Energy previously maintained an equity ratio comparable to the subsidiary, but more recently its equity ratio has declined to 46.1% at the end of 2016, and 45.3% as of 6/30/17. (T8 pp 394-96 T14 p 48)

Taking these factors into consideration, a 50% equity ratio is sufficiently conservative for Duke to access credit markets at reasonable rates, and is fairer to consumers because it reduces the revenue requirement substantially. Duke has not shown that the higher equity ratio proposed in the partial settlement is needed, and the extra $15 million added in Duke's revenue requirement due to the higher equity ratio is excessive and burdensome to consumers in Duke's service territory.

C. It Is Within the Commission's Discretion to Approve a Rate of Return on Equity That Is Less Than 8.5% Under Current Stock Market Conditions; Such a Reduction Would Reduce the Annual Revenue Requirement Significantly; and the Lower ROE Would Be Fair to Investors and Ratepayers Particularly Given the Other Factors In This Case.

Another component of the authorized rate of return is the return on equity capital, i.e., the annual percentage return allowed to the utility's stock investors.[42] Unlike the rate of return on debt which is contractually defined and can be directly observed as the interest rate on debt securities, the cost of equity is not directly observable and is not fixed by contract. Instead, the cost of equity must be estimated or inferred based on market data and various financial models. (T8 p 335; T13 pp 85-86; T14 pp 51-52, T15 pp 165-66) A

[42] *State ex rel. Utilities Com. v. Public Staff-North Carolina Utilities Com.*, 323 N.C. 481, 487 n 7, 374 S.E.2d 361, 364 (1988); N.C. Gen. Stat. § 62-133(b)(4).

range of results is produced using quantitative models, and judgment is required in interpreting the results. (T8 p 336; T13 p 85).

Four expert witnesses provided estimates of the range of rates for a reasonable ROE and specific ROE recommendations under current economic conditions based on quantitative models as follows:

TABLE 1

	ROE	ROE RANGE	DCF	DCF RANGE	CAPM	CAPM RANGE	Comparable Earnings	Comparable Earnings Range	OTHER	
Polich	**8.48%**	**8.25-8.65**	8.48%	8.25 - 8.65		7.22 - 8.68				T 13 p 84,99
Parcell	**9.20%**	**8.85-9.50**	8.85%	8.4 - 9.3	6.40%	6.1 - 6.7	9.50%	9.0 - 10.0		T 14 p 18-19
O'Donnell	**9.00%**			7.75-8.75		4.6-7.5		8.75-9.75		T 15 p 186-87
Hevert*	**10.75%**	**10.25 - 11.0**		8.52-10.84**		8.92-11.34			9.96-10.37***	T 8 p 323
	9.90%	**Partial Settlement ROE**								T 14 p 106-107

*Rebuttal updated results

** This reflects the range of the nine "Mean" results, most of which were lower than 9%, and only one of which exceeded 10.75%.

*** These results for the Risk Bond Yield Risk Premium use "authorized" returns rather than market data to estimate ROE.

1. An ROE of 8.48% is sufficient for Duke to obtain and maintain investment capital on reasonable terms, as is shown in the results of the Discounted Cash Flow analyses performed by expert witnesses.

Richard Polich, an expert who testified for the AGO,[43] (T13 p 74) estimated that the range of reasonable ROE results for Duke is between 8.25% and 8.65% based on his discounted cash flow (DCF) analysis, and recommended an 8.48% ROE, the median result. (T13 p 92) "According to [the discounted cash flow] method, the proper rate of return is

[43] Mr. Polich is a manAGOing director and consultant with GDS Associates, Inc., has degrees in nuclear and mechanical engineering and an MBA, and over 30 years of experience in the energy sector. (T 13 p 76)

determined by adding to the stock's current yield a rate of increase which investors will expect to occur over time." 323 N.C. at 488, 374 S.E.2d at 365. The DCF approach is the model most commonly relied on by cost of capital witnesses to evaluate what return should be authorized (T13 p 90, T14 p 59, T15 p 169) and is actually used by investors when they evaluate stocks. (T15 p 169)

The reliability of the 8.48% median DCF result produced by Mr. Polich is supported by similar studies that were performed by David Parcell[44] and Kevin O'Donnell[45]. The 8.48 % median result falls toward the upper end of the 7.75 to 8.75 ROE range produced in Mr. O'Donnell's DCF study. (T15 p 186) It appears to be lower than Mr. Parcell's DCF results, but that is because Mr. Parcell selected the highest of the DCF results in his study to estimate ROE "in order to be conservative." (T14 p 59) The median of Mr. Parcell's DCF results was 7.6% using his own proxy group or 7.7% using Mr. Hevert's proxy group. The mean was 7.7% using his own proxy group and 8.0% using Mr. Hevert's. (T 14 p 58) Thus, Mr. Parcell's DCF study also provides evidentiary support for an ROE of 8.48% or less.

Mr. Robert Hevert, [46] who testified on behalf of Duke, produced dozens of different DCF results that ranged from 7.66% to 11.34% in his updated analyses provided on

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[44] Mr. Parcell testified on behalf of the Public Staff. He is a Principal and Senior Economist of Technical Associates, Inc., has a B.A. and M.A. in economics and an M.B.A., and has over 40 years of experience as a consulting economist and expert witness. (T14 p 15)

[45] Mr. O'Donnell testified on behalf of the Carolina Utility Customers Association. He is President of Noval Energy Consultants, Inc., has degrees in civil engineering and an MBA, and has over 25 years of experience as a consultant on utilities issues and a financial analyst for over 25 years. (T15 p 121)

[46] Mr. Hevert testified on behalf of Duke. He is a Partner of ScottMadden, Inc., has degrees in Business and Economics and an MBA, and has close to 30 years of experience working in regulated industries including time served as a financial officer and in other capacities.

Rebuttal (T8 p 323) and dozens more results ranging from 8.07% to 11.41% in his direct testimony. (T8 pp 85, 96-97) Yet, most of his results – particularly the more recent results - are much closer to 8.48% than they are to his 10.75% ROE recommendation. (*Id.*)

Mr. Hevert's analyses are generally flawed by the use of methods and inputs that are "systematically biased upward in a manner that significantly inflates his cost of equity conclusions." (Parcell T14 p 79) The reason that the DCF results are so much higher than those produced by the other witnesses is that he used much higher long-term growth factors in his multi-stage DCF models. (T13 p 95) For example, in his multi-stage Gordon DCF model, he used a long-term growth rate of 5.5% which is over 100 basis points higher than the Gross Domestic Product (GDP) growth rate estimated by reliable resources such as the Energy Information Administration or the Social Security Administration. (T13 p 95)

The utilities commission in Missouri came to a similar conclusion that Mr. Hevert's analyses overstate growth factors in 2015 when it examined similar analyses that he performed for Ameren Missouri. (T8 pp 386-87) The Missouri Commission found that his multi-stage DCF analysis was based on a nominal long-term GDP growth rate outlook that was overly optimistic, and that by adjusting his DCF analysis to reflect the level of consensus economists' forward-looking real GDP growth outlooks, his DCF study would have produced an 8.8% ROE estimate instead of a 10.02 ROE. (T8 pp 386-87) [47]

Mr. Hevert does not believe that the Constant Growth DCF model is a reasonable approach under current economic conditions. (T8 p 85) However, a properly-performed multi-stage DCF approach does not result in a higher growth rate factor. Exhibit RAP-3

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[47] The Missouri Commission also found that Mr. Hevert's "CAPM" analysis used an unreasonably high estimate of projected market returns. (T8 p 387)

(Off. Exh.13 p 36;T14 p 60). Moreover, Mr. Hevert's contention does not stand up that the Constant Growth DCF model is too affected by low interest rates, which are driven primarily by the monetary policies of the Federal Reserve adopted in response to the recession in 2008/2009. (T8 pp 86-87) That criticism fails to take into account that the Federal Reserve has increased interest rates multiple times and started to unwind its "quantitative easing" policy, yet interest rates for utility bonds have dropped. (T13 pp 107-108) Mr. Hevert also criticizes the assumption in the Constant Growth DCF model that economic factors will stay the same into the future. The model remains relevant and informative, however, (T14 p 59) and the fact that market conditions may change in the future is not reason to abandon the model. The ROE should be fixed to reflect *current* economic conditions, and if conditions change significantly in the future, Duke may seek an investigation and change of rates. (T13 pp 107-108); *see* N.C. Gen. Stat. § 62-133(e).

Another reason that Mr. Hevert gave little weight to the market data in his DCF analysis is because he contends that it would reduce the ROE in this case too much from the ROE approved in Duke' last rate case. (T8 p 171) However, the fact that the ROE would drop considerably is not an appropriate consideration, and relies incorrectly on the assumption that the ROE in Duke's existing rates is a starting point for measuring how much the cost of capital has changed. The ROE in the last case should not be used as a starting point in the analysis because it was not reevaluated in this case, and it is not appropriate to assume that the Commission would set the same ROE for that case if it were to estimate it again in this proceeding.[48]

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[48] *Duke Power*, 285 N.C. at 395, 206 S.E.2d at 281 (The findings in a previous rate case are not *res judicata*, "even as to what was a fair rate of return on common equity capital as of the dates of those former orders, and such findings do not prevent the Commission from finding a lower return on common equity capital fair in the present case, even

2. Other analyses performed by the expert witnesses also support the sufficiency of an ROE of 8.48%.

The experts also performed ROE estimates using the Capital Asset Pricing Model (CAPM). The CAPM results produced by witnesses Polich, Parcell, and O'Donnell are significantly lower than the results of the DCF studies they performed. See Table 1. Mr. Hevert's CAPM, on the other hand, produced even higher results at the top of his CAPM range. (*Id.*) The main factor that causes his high CAPM results is his over-estimate of the projected returns associated with equity capital as compared to risk-free investments (i.e., the risk premium). He relies on problematic DCF analyses to estimate projected equity returns. (T14 pp 89-90) The flawed effect of his over-estimated projection of the risk premium was also observed by the Missouri Commission in its 2015 Order. (T8 p 387)

Another model used by Mr. Parcel – a Comparable Earnings (CE) study – compares the actual return expected on the original cost book value of enterprises with similar risk, and evaluates investor acceptance of the returns as indicated by the resulting market-to-book ratios. (T14 p 74) Where the market-to-book value ratio for a stock is greater than one (i.e., > 100%) the company can attract capital in a way that enhances the book value of existing stockholders and maintains a favorable environment for financial integrity. (*Id.*) Mr. Parcell's CE study identifies an ROE range of 9.0 to 10.0 percent. He shows that market-to-book ratios are substantially above 100% (i.e., the market price is significantly higher than book value – 140% historically and 175% in projections) even as actual returns fall lower. From these factors he posits that a 9.5% comparable earning result (the midpoint of his range) is well above the actual earned ROE for the regulated

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though the tide of inflation has continued to rise"); see also N.C. Gen. Stat. § 62-133(e) ("The fixing of a rate of return shall not bar the fixing of a different rate of return in a subsequent proceeding.")

companies, (*Id.*), and is more than sufficient for the company to attract new equity capital without dilution. (T14 p 75)

The other model used by an expert is Mr. Hevert's "Risk Bond Yield Premium." Instead of market-based data, Mr. Hevert uses data in this model about the ROEs *authorized* by regulators in other rate proceedings to estimate ROE. The authorized rates of return reflect policies and underlying data estimates of market conditions that are not provided to the record in this case, however, and it is not appropriate for the Commission to determine Duke' ROE based on such evidence.[49] The Commission's reliance on past ROE determinations authorized for other utilities in other states, without evidence tying those determinations to the facts of this case, is unlawful, and prevents the Commission from fairly considering current economic conditions. (*Id.*)

3. A thoughtful review of the ROE is important because even a seemingly small change to Duke's authorized ROE makes a large difference of millions of dollars in Duke's revenue requirement.

Cost is an important factor to consider in determining a reasonable ROE because even small increases or decreases in the ROE make a large difference in the utility's revenue requirement, particularly when the cost of income taxes is taken into account. Over $ 96 million would be shaved from Duke's annual revenue requirement if the Commission were to establish an 8.48% ROE instead of the 9.9% ROE proposed in the partial settlement. Exhibit RAP-3 Settlement p 1 (Off. Exh.13 p 43) When the capital structure is also adjusted to 50/50 debt to equity, the combined reduction in the revenue requirement is $107.7 million compared to what is required under the partial settlement. Exhibit RAP-3 Settlement p 2 (Off. Exh.13 p 44)

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[49] *State ex rel. Utilities Comm'n v. Cooper,* 367 N.C. at 443, 758 S.E.2d at 643; *State ex rel. Utilities Comm'n v. Public Staff,* 331 N.C. 215, 225, 415 S.E.2d 354, 361 (1992).

D. The Commission Must Fix a Rate of Return That is Fair to Consumers and Investors As Specified in N.C. Gen. Stat. § 62-133(b)(4) and It Is Improper to Fix an Excessive Rate of Return That Has Been Negotiated In Exchange for Other Factors.

Under terms of a non-unanimous partial settlement between Duke and the Public Staff, a number of disputed issues in the rate case were settled, including the rate of return. (T8 p 326-327) Under the proposal, the capital structure would be 52% equity and 48% debt; the cost of equity would be 9.9%, and the cost of long-term debt would be 4.05%, resulting in an overall rate of return of 7.09%. (T8 p 326) Public Staff witness Parcell testifies about the settlement that his position in a fully litigated proceeding remains that the appropriate capital structure is 50/50 equity to debt and the appropriate ROE is 9.20%, which is the approximate midpoint of his range of 8.85% to 9.50%. (T14 p 107) However, he agrees to the cost of capital components in the proposed settlement based on the overall settlement. (T14 p 106-107)

When the Commission evaluates the proposed Settlement, although it may consider the multiple items addressed in the settlement, it is beyond the Commission's authority to fix an excessive rate of return negotiated in exchange for other factors addressed in the settlement. Unlike more general ratemaking provisions found in other jurisdictions that apply a "just and reasonable" standard to overall rates established in a rate case, North Carolina's ratemaking statute requires the Commission to "fix" the rate of return, taking into account specific considerations.[50]

E. The Current Economic Conditions Affecting Consumers in Duke's Service Territory Indicate that Wages Have Not Increased at the Same Rate as Other

[50] *See* N.C. Gen. Stat. § 62-133(b)(4); *Thornburg II*, 325 N.C. at 490, 385 S.E.2d at 466. ("Section 62-133 provides a step-by-step procedure for the Commission to follow in fixing these rates.")

Locales, and a Decision Approving an Excessive Rate of Return Will Unreasonably Burden the Region.

The Commission must treat consumer interests fairly, not as a mere afterthought, and must make findings of fact about the impact of changing economic conditions upon consumers when it considers what rate of return to establish pursuant to N.C. Gen. Stat. § 62-133(b)(4).[51]

North Carolina is doing well as a state in terms of growth, but North Carolina households have less ability on average to absorb increases in the cost of living – such as utility rate hikes – because per capita income is considerably lower than in other states while the cost of living is not. (T 13 p 115) North Carolina has recently enjoyed a stronger GDP growth rate than the national average and the cost of living index for North Carolina is slightly lower (1.1%) than the national average. But per capita income is well below the national average (13.8% lower), and income has grown at a slower pace than the nation as a whole. (T13 p 113) The almost $7,000 difference between North Carolina per capita income and the national average – paired with a cost of living index that is only slightly less than the overall cost of living – means that North Carolina households have to stretch their resources farther, and thus Duke's ratepayers are less able to absorb rate increases than households in other areas of the country. (T13 p 114)[52]

Customers testified about the impact of the proposed rate increase at public hearings held in Asheville, Raleigh, Rockingham, Snow Hill, and Wilmington, (T1-T5) and identified the following key concerns:

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[51] *State ex rel. Utilities Comm'n v. Cooper*, 367 N.C. 644, 650, 766 S.E.2d 827, 830 (2014).

[52] Current economic factors affecting customers was also presented in expert testimony presented by Mr. Mr. Parcell and Mr. Hevert. (T 14 pp 94-97, T8 pp 121-132)

- Low income and senior citizens or disabled persons who live on fixed incomes will have difficulty paying an increase in utility rates. (T1 pp 20-28, 44-47, 53-56, T2 pp 19, 51, 61, 78, 94, 98, 120, 132, 147, 155, T3 pp 19, 37, 63, 117, T4 pp 17, 19, 26, 39, 52, 58, 71, T5 p 27, 34, 36, 40, 56, 58, 60, 66, 72, 74, 76, 79,)
- Some are forced to choose between paying for electricity and purchasing essentials like prescription drugs. (T1 pp 47-48, T2 p 132, T3 p 100)
- The large rate increase combined with the proposed steep increase in the unavoidable fixed monthly charge place an undue burden on smaller users. (T2 p 102, T3 p 19, T4 49, 60)
- The burden of high rates falls on the entire economic community because consumers have less money to spend on other goods and services. (T3 p 37)
- Most witnesses opposed Duke's proposal for a rate increase to recover costs associated with coal ash basin closures given the revelations about poor operation of the ash basins, and the effect on neighboring properties and waterways. (T1 - T5)

In conclusion, ratepayers need a break, particularly if the Commission intends to allow Duke to recover coal ash closure costs. If the Commission exercises its discretion by allowing Duke to recover such costs in rates, the Commission should also exercise its discretion on behalf of consumers and establish a substantial reduction in the rate of return.

The rate of return evidence does not support authorizing either a 9.9% ROE or a 52% equity ratio for the capital structure as proposed in the partial settlement. The excessive ROE and the excessive reliance on equity in the company's capital structure will cost ratepayers millions of dollar per year unnecessarily. The partial settlement will impose an unreasonable burden on the region served by Duke and it is appropriate for the

Commission to reduce the equity ratio in the capital structure to 50% and to reduce the ROE to 8.48% as those modifications are supported by the evidence.

IV. THE IMPORTANT AND COSTLY PROJECT OF GRID MODERNIZATION SHOULD BE UNDERTAKEN WITH DUE CARE.

During proceedings in this case, Witness Fountain testified that Duke and Duke Energy Carolinas have planned and are beginning to execute a grid modernization plan called Power/Forward Carolinas that is expected to cost $13 billion over the next decade. (T6 p 59-60) The goal of Power/Forward is to make power more reliable and secure. (T5 p 60) Witness Simpson testified that Duke's plans are intentionally less detailed after the first two years in order to allow Duke to take advantage of evolving technologies and expected price reductions. (T9 p 54) However, witness Simpson did provide the following break-down of the planned $13 billion expenditure:

Targeted underground transmission lines	$4.9 billion
Distribution H&R	$3.5 billion
Transmission	$2.2 billion
Self-optimizing grid	$1.2 billion
Advanced Metering Infrastructure	$ 549 million
Enterprise systems upgrades	$103 million

(T9 p 69)

The AGO fully supports and applauds Duke's commitment to planning for efficient and effective utility service for its customers. Its obligation to do so is not in question. The issue is whether it has done the necessary work to determine whether this particular approach is a reasonable and prudent way to attack the problem of reliability and security of the grid.

Public Staff witness Jack Floyd testified that "additional reporting is needed to allow the Commission to better understand Power/Forward Carolinas and to quantify its benefits. The extent of the planned investment and the potential impact on customer rates requires additional reporting, in order to assist the Commission and Public Staff in understanding Power/Forward Carolinas and evaluating its cost-effectiveness." (T19 p 127) Witness Floyd recommends that the Commission require Duke to provide additional information regarding:

> (1) the purpose of each project or categories of projects;
> (2) a schedule of implementation;
> (3) changes to the schedule that would impact the project's cost or in-service date;
> (4) project capital and O&M costs . . .;
> (5) how Duke proposes to recover these costs; and
> (6) a demonstration of how the project is designed to reduce the outAGOe frequency and duration of individual circuits or other transmission and distribution assets affected by the project.

(T19 p. 127)

Dr. Caroline Golin, testifying on behalf of the North Carolina Sustainable Energy Association, raised similar concerns, noting that Duke admits that it has not performed a cost-benefit or business case analysis. (T13 pp 27 and 40; Duke Response to NCSEA DR 5-14/ Golin Direct Exhibit CG-3/Off. Exh. 13 p 15) Witness Golin observed that in light of Duke's vague responses to NCSEA data requests, Duke appeared to have a much more clear vision of how much it wanted to invest in ratebase than of how it was going to spend ratepayers' money. (T13 p 25) Dr. Golin testified that Duke's Power/Forward proposal does not meet best practices for grid modernization, in that it lacks clear and measurable goals, stakeholder engagement, integrated distribution planning, and cost/benefit analysis.

(T13 pp 29-31) (In its settlement with the Public Staff, Duke has now agreed to conduct one technology conference with stakeholders.)

It is puzzling why Duke Energy commissioned and introduced into evidence an outside report to tout the advantages of Power/Forward to the North Carolina economy—which is not an element on which this Commission is statutorily charged to make its determinations—and yet has failed to commission or produce a formal cost-benefit analysis of whether spending $4.9 billion on burying transmission lines is a cost-effective way to address outages. (North Carolina impacts of Duke Energy's Power/Forward grid improvement plan/Simpson Rebuttal Ex 1/Off. Exh.9 p 4) Defending its decision to move forward without any formal assessment of the costs, risks, and benefits, Duke offered a textbook example of the "politician's syllogism": "We must do something. This is something. Therefore we must do this." (T9 pp 61-62)

Prior to spending many billions of dollars on grid modernization efforts, Duke should be required to demonstrate to this Commission that the money will be spent on appropriate programs. Without taking a position on whether the Commission should open a separate docket, the AGO urges the Commission to enter an order requiring Duke to provide the Commission and the public the information outlined in the testimony of witnesses Floyd and Golin.

Additionally, the Commission should require Duke to articulate in detail its integrated distribution plans for smaller distributed energy resources, and in particular with regard to interconnecting with third party power generators, such as solar, hydro, wind. The issues in this rate case serve as a graphic illustration of the heavy costs of fossil fuels.

V. ANY ORDER ON RATES SHOULD ACCOUNT FOR RECENT REDUCTIONS IN THE CORPORATE TAX RATE.

Due to the recent reduction in the federal corporate income tax rate from 35% to 21% enacted in late 2017 and effective for 2018, the Commission has opened a rulemaking proceeding to consider the rate adjustments that public utilities should make to reflect the impact of the tax cut on cost of service. See the Order Ruling that Components of Certain Public Utility Rates Are Provisional As Of January 1, 2018, Initiating A Generic Proceeding, And Requesting Comments *In the Matter of The Federal Tax Cuts and Jobs Act* issued January 3, 2018 in Docket No. M-100, Sub 148 ("the Tax Cut Order"). The AGO will participate in the rulemaking and asks the Commission to take appropriate action in this case to order that rates established in this docket will be billed and collected on a provisional basis and appropriate deferral will occur as directed in the Tax Cut Order pending final disposition of the rulemaking in order to reflect the benefit of the tax cut in rates.

CONCLUSION

For the reasons set forth above, the Attorney General's Office asks the Commission to deny the coal ash recovery costs sought by Duke; not pour an excessive amount of any rate increase into the fixed customer charge; and limit Duke's rate of return to a market-based 8.48% on 50-50% debt to equity capital structure. The Commission should also exercise continued oversight of Duke's grid modernization plans commensurate with the expected expenditures and the importance of the project. Furthermore, the Order in this case should make the rates provisional until such time as the recent change in tax laws can be accounted for.

Respectfully submitted, this the 12th day of January, 2018.

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CERTIFICATE OF SERVICE

The undersigned certifies that she has served a copy of the foregoing BRIEF OF THE ATTORNEY GENERAL'S OFFICE upon the parties of record in this proceeding and their attorneys by electronic mail.

This the 12th day of January, 2018.

/s/ Margaret A. Force
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